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The Journal OF THE South Carolina Medical Association



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The Journal OF THE South Carolina Medical Association



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J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.

E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

NEW SCIENTIFIC COMMITTEE.

The last House of Delegates upon recommendation of President Earle, made, a new department in reference to the program Committee. This Committee has now become elective by the House of Delegates. One member serving three years, one member serving two years and one member serving one year, with the Secretary of the State Medical Association Ex-officio member. It is understood that this Committee shall be entirely responsible for the scientific feature of the State Medical Association and that the officers of the Association shall be relieved of much of this duty so that they may give their time to other work. The personnel of the Committee for this year is such that there is no room for doubt as to the competency and efficiency of each member thereof and we bespeak the hearty co-operation of our

membership in making the program for 1918 the most interesting yet given us. The members of the Committee are as follows:

Dr. R. S. Cathcart, Charleston, Chairman.

Dr. F. A. Coward, Columbia.

Dr. H. R. Blaek, Spartanburg.

Dr. E. A. Hines, Seneca, Secretary Ex-Officio.

RECENT DEATHS OF PROMINENT MEMBERS.

Death has claimed a heavy toll from our membership in the past few months. As we go to press we learn of the death of Dr. T. P. Whaley of Charleston. Dr. Whaley was one of the Association's most active members for many years. For nine years he was Secretary of the State Medical Association and was honored at the close of his term of office by being elevated

to the Presidency. He thus gave a decade of his life during the height of his energy and vigor, to the upbuilding of the South Carolina Medical Association. He served on the staff of the Journal and filled many other offices in organized medicine with honor to himself and profit to the profession.

We also note the death, in the last few weeks, of Dr. R. L. Moore, of Columbia, a specialist in diseases of the eye, ear, nose and throat, of marked ability. Dr. Moore was in mid life and was greatly beloved by a large circle of friends and acquaintances, as well as being popular with his professional brethren.

Recently we have lost Dr. C. C. Jones of Greenville, formerly Mayor of the city and a prominent practitioner for about thirty years.

Also a few months ago Dr. Albert Nathan of Charleston died, practically in the beginning of a most useful career. He was secretary for some time, of the Medical Society of South Carolina and rendered most acceptable service in that capacity.

One of our honorary members passed away at St. Mathews November 28th, Dr. W. L. Pou, who practiced medicine for sixty years and was known at "St. Mathews grand old man."

We here write this brief tribute sorrowfully, but with the assurance that the Committee on Necrology will at the Aiken meeting, report in full on the life and attainments of, not only these members, but several others who have died since the meeting at Spartanburg.

NORWOOD MEMORIAL.

Members will please take due notice that the last House of Delegates assessed each member twenty-five cents extra to finish payment for the Nor-

wood Memorial Monument which has been completed and put in place.

TITLES OF PAPERS FOR THE AIKEN MEETING.

The Secretary is ready to receive the titles of papers to be read at the State Association meeting April 16, 17, 18, 1918. It is hoped that the Provisional program may be ready for publication in the March Journal. The Scientific Committee of course will arrange the papers and have full charge of the Program.

CHANGE OF MEETING PLACE OF TRI-STATE MEDICAL ASSOCIATION.

We have a letter from Secretary R. E. Hughes to the effect that the Tri-State Medical Society will be held at Charleston, February 20th and 21st, instead of Spartanburg. The change has been made on account of the crowded condition of the hotels at Spartanburg. We are glad to call special attention of our members to the opportunity and pleasure awaiting all who attend this meeting.

PAYMENT OF DUES.

Keep the Man at the Front in Good Standing.

The 1918 dues should be readily collected this year, as we believe there is no valid excuse for any delay. We wish to call attention, however, to the very important matter of every County Society making unusual efforts to keep the members at the front in good standing by paying their dues for them. This appears to be the custom in many places throughout the country.

LETTER FROM DR. CARROLL.

(Field Hospital No. 327, Camp Gordon,
Ga. Dec. 12, 1917.)

Dear Dr. Hines:

I have not seen a Journal of the South Carolina Medical Association in some six months and am pining for a sight of one, so I am writing to ask that you mail my copies to the above address in future; also that, if you have any old copies of the last few months on hand, you send them along.

As you may or may not know, I am, and for the last four or five months have been, with Uncle Sam's boys in khaki. I spent a couple of years, from August 10, 1917 to October 17, 1917, to be chronologically accurate, at Camp Greenleaf, the medical officer's training camp, Ft. Oglethorpe, Ga., unlearning what I thought I knew about medicine, and trying to learn something about being a soldier. I discovered, after a short time, that what I didn't know about military matters, if put into book form, would make the Twentieth Century Practice of Medicine look like Finnegan's celebrated message. I almost immediately reached the conclusion that as far as soldiering, at least, was concerned, I "never knew nothing—and I always will." Before going up to Greenleaf, I had read the prospectus and had formed a vague, and as subsequent developments showed, a magnificently erroneous idea of what I was to be up against. I read of police duty and conceived of a rather dignified but entirely harmless process, accompanied by a sword or a club and more or less pomp and power. Instead behold a whole camp of erstwhile staid and dignified doctors engaged in the somewhat prosaic but highly utilitarian and sanitary occupation of sweeping out barracks, making up beds, filling water pails, picking up burnt matches,

tooth picks, cigar and cigarette butts, and in short, making a general toilette of the barracks and company streets. Some of the most inventive of us soon learned to spear the cigar and cigarette butts on the end of a sharpened stick, thereby saving our fingers and our backs considerable wear and tear. Of the marches and drills and lectures I will have nothing to say; they were all in the day's work and expected; but there was another feature which did not turn out as I expected—equitation. I had read of equitation and though I hadn't the remotest idea of what equitation was, and imagined it to be some sort of a balancing act—an impression subsequently shown to be not entirely erroneous—I did not want to expose my ignorance by asking. I now know that this erudite term is soldieresque for horse-back riding. According to schedule, we were to ride for two hours each day besides taking "strategic rides" on Saturdays and Sundays if we so desired. This was a dream, an army fiction. We only had about half a dozen rides of the drill variety and absolutely none of the "strategic" assortment during my whole stay; but the display of novelty and originality manifested upon these occasions amply compensated for the limitations as to the number of rides. Many of the medical officers had never ridden before and apparently their conceptions of what was proper under such circumstances was as varied as the officers themselves. Some showed a fondness for the horse's neck and clung affectionately thereto; others pinned their hopes and their hands to the saddle; still others in mounting missed the saddle entirely and sat somewhat uncertainly but with the best of intentions upon the horse's rump. The ensuing drill was highly instructive to both men and horses,

the latter being old cavalry mounts, and doubtless will be remembered by both with pleasure and satisfaction.

Among the officers in my company were, Lieut. W. J. Burdell, the man who made Lugoff famous; Klugh, Mower, Sally, Norton, and Woods, all of South Carolina, and all good soldiers. Burdell showed a leaning to sanitation, and talked continually, as is his habit, on bugs and flies and things. He made much progress while at Camp Greenleaf and was sent out as sanitary inspector to Camp Upton with the prospect of a majority in sight. While in camp, he was honored by being called upon to deliver a lecture upon mosquitoes before the whole student body, a duty which he performed to his own, the student body's and the authority's entire satisfaction, without, at the same time, hurting the feelings of the mosquitoes.

Since Oct. 20th, I have been here with the 327 Field Hospital. This is a part of the 307 Sanitary Train, a sanitary train consisting of four field hospitals and four ambulance companies, and carrying a personnel of nearly one thousand officers and men. We are kept fairly busy from the time the infernal bugle starts the trouble at 5:30 A. M. until Retreat; but we have a fine bunch of fellows, both officers and enlisted men, and we don't mind the work; but those bugles! You know how we all dread the telephone on a cold night. Well, say those bugles have the telephone tied to the post. One never starts anything worth while but one of those blamed so-called musical instruments cuts loose—and there is no chance to hang up the receiver either. I am sure that if I ever get back into practice I will have a bugle hung up under my sign with this legend written above "If you want the doctor, blow the bugle."

Any other sound would fail to make me stir.

Geewhiz! or words to that effect, but it is cold here. Since Saturday the thermometer has been flirting with zero and the ground is covered with a poetically beautiful but practically infernal blanket of snow. Our quarters are amply ventilated, believe me but ventilation of itself, desirable as it is, does not always tend to promote comfort in cold weather, otherwise, as the saying goes, all is fine and dandy.

Best regards and sincerest good wishes for you personally and journalistically.

I am very sincerely,

Francis J. Carroll,

Formerly F. Julian Carroll.

**PEE DEE SOCIETY SUGGEST
CHANGE DATE STATE ASSO-
CIATION MEETING.**

The following resolutions were adopted at a meeting of the Pee Dee Medical Association December 14, 1917.

Whereas the present date of the meeting of the South Carolina Medical Association was fixed so as to allow the faculty and the graduating class of the South Carolina Medical College opportunity to attend these meetings immediately after their graduation on the 31st of March.

And, Whereas this reason no longer exists and the season is uncertain and often inclement and the meetings thereby are frequently rendered disagreeable and unpleasant.

And, Whereas this season is also a very busy one, either with the gripes or pneumonias of late winter or the enteric troubles of an early spring; and a great number of the physicians are absolutely unable to get away from their work at this season.

And, Whereas a meeting in July or

August would find a season of comparative quiet as regards sickness and would also come at a time when a great many people are taking their annual holidays and when the doctor can find it most convenient to take his holiday.

Therefore, Be it resolved that the Pee Dee Medical Association memorialize the South Carolina Medical Association to change the date of this annual meeting from the 3rd Tuesday in April of each year to the 3rd Tuesday, or any convenient date, in either July or August.

Signed
Frank K. Rhodes, M. D.

READING NOTICE.

The so-called fractional method of gastric analysis advocated by Rehfuss has been found to have such advantages that it has been introduced in the Battle Creek Sanitarium, where test meets to the number of thousands are given each year. To the patients, the new plan is vastly preferable. Indeed, the swallowing of what was often called "the garden hose" was attended in most cases by actual suffering and in many by severe pain. Under the fractional method, a very small tube is used. An oval tip, made

of metal and perforated, makes the swallowing easy. Of course, it is inconvenient to have to sit an hour and a half or two hours without removing the tube, but there is no real distress. The usual test meal of two slices of toast and a glass of water is given, at intervals of half an hour, a small specimen of the gastric juice, 10 or 16 C. C. is taken, until the acidity curve begins definitely to come down.

Under the old method, the practice was to take out all the gastric juice at the end of an hour. At Battle Creek, the period had been lengthened to an hour and a quarter because this was found to be the usual time of greatest acidity. A comparison of the two methods shows that the original plan was misleading in many instances. Under that procedure, cases would be set down as normal if the acidity was shown to be at the usual percentage one hour after the meal. However, as the fractional method proves, many patients who have the right acidity at that minute, many have for too little or too much, before and after the hour has passed. By studying the complete cycle of digestion, an accurate diagnosis may be made.

ORIGINAL ARTICLES

CYSTS OF THE PANCREAS.

By J. R. Sparkman, M. D., Columbia,
S. C.

CYSTS of the pancreas are one of rarer conditions with which the surgeon has to deal. Just how many cases occur and are either not diagnosed or are not subjected to operation is a matter of speculation. If autopsies were more commonly done we would probably find that they are of more frequent occurrence.

Read before the South Carolina Medical Association, Spartanburg, S. C., April 19, 1917.

While they are quite rare, I think they are of sufficient interest to justify reporting them.

Before making the case reports, I

wish to present briefly some of the characteristics of the different varieties of cysts.

These cysts are classified first as true cysts and false or pseudo cysts.

Of the true cysts there are two varieties, (1) retention, (2) proliferative.

Retention cysts are the results of duct obstruction which may be due to pancreatic or biliary calculi, pressure from without, tumors of the pancreas or chronic pancreatitis with resulting sclerosis. The latter is supposed to be the most frequent cause.

Their size and number vary. Their walls are formed of fibrous tissue and they may or may not be lined by epithelium. Where there is an absence of an epithelial lining it is supposed to be due to the corrosive action of the pancreatic juice.

Proliferative cysts are quite uncommon. Many of these border closely on the cystic carcinoma.

Pseudocysts are supposed to be caused by traumation or acute hemorrhagic pancreatitis. The escape of the irritating pancreatic secretion is probably the cause of these cysts and the cause of their increase in size. Hemorrhage from rupture of the gland must be invariably accompanied by the escape of at least a small amount of pancreatic fluid.

Pseudocysts or apoplectic cysts, as they are sometimes called, not infrequently occupy the lesser peritoneal cavity.

Some men have thought that possibly some of these cysts are really an accumulation of fluid in the lesser peritoneal cavity due to causes other than disease or injury of the pancreas.

These cysts usually contain some blood recent or old, but their contents may be perfectly clear. One or more of the pancreatic ferments may be

found in their contents, but this is usually not the case.

Concerning the identification and differentiation of pancreatic cysts by the character of their contents, Opie says, "The character of the fluid within the cyst furnishes little evidence of the origin of the lesion. Blood is usually present and may have undergone changes which render it brownish, coffee colored, greenish or even black; after absorption of blood, traumatic cysts on the one hand may contain clear fluid, whereas cysts caused by retention on the other hand may contain bloody fluid as the result of erosion or rupture of the dilated blood vessels in the walls of the cyst."

It is often possible to demonstrate one or more of the three well known enzymes of the pancreatic juice in the contents of pancreatic cysts, but the proteolytic, lipolytic, and diastatic enzymes have been found in fluid removed from abdominal cysts which have not had their origin in the pancreas."

"Moreover the contents of true cysts of the pancreas may exhibit no enzymatic activity; the antitryptic action of the blood serum may explain the absence of trypsin in hemorrhagic cysts and Heidenhain has shown that enzymes disappear in the secretion of a chronically inflamed gland.

"Nevertheless if an abdominal cyst contains fluid capable of digesting coagulated egg albumen or of splitting starch its origin in the pancreas is probable."

Microscopic examination of the cyst wall is the only certain method of differentiating true and false cysts.

Symptoms. Pain which varies in character and location is the most constant single symptom, but has no special diagnostic significance.

The other symptoms presenting will

depend chiefly on the disturbance produced in neighboring organs from pressure by the cyst and from adhesions. Most cases will present some symptoms referable to the stomach. These consist chiefly in nausea and vomiting and bear quite a definite relation to the ingestion of food. Nausea is not as prominent a symptom as vomiting, which suggests interference with the motor activity of the stomach rather than irritation of the gastric mucosa.

The presence or absence of digestive disturbance such as fatty stools, bulky pale stools, glycosuria, etc., due to a decrease or altered pancreatic secretion, depends on the amount of gland substance which has been destroyed by previous inflammation or by the pressure from the cyst, and is of course variable. These symptoms were not prominent in the cases to be reported.

Opie says, "that emaciation has been noted quite frequently and was followed by a rapid gain in weight after the cysts had been removed or drained." Emaciation was not marked in our cases.

Should a profuse hemorrhage occur into a cyst acute symptoms similar to those of acute hemorrhagic pancreatitis would probably occur. Dyspnoea may be present in the case of large cysts which interferes with the excursion of the diaphragm. Oedema of the feet and ascites are rarer pressure symptoms.

Diagnosis. These tumors are usually smooth, are not expansile, though they may transmit impulses from the abdominal aorta. There is very little mobility except in some cases where the cyst originates in the tail of the pancreas. Fluctuation may be detected if the cyst is large and not tensely distended.

While these tumors usually present between the stomach and the trans-

verse colon in or near the midline, their position is variable. The position that these cysts occupy in relation to the other abdominal viscera depends upon what part of the pancreas the cyst originates in.

A cyst arising from the upper border of the body of the pancreas may pass between the stomach and the liver and lies behind the gastro-hepatic omentum.

A cyst may grow forward between the layers of the transverse mesocolon, the colon crossing the cyst, or it may project above or below the colon. Gradual distention of the stomach and colon with air is the best method of determining their relation to the cyst.

From the various positions the cyst may occupy, it will be readily seen that they may be mistaken for several conditions, the more common of which are, a distended gall bladder, and enlarged spleen, cysts of the kidney, hydronephrosis, omental, mesenteric, and ovarian cysts.

Given a case of cystic tumor occupying one of the positions more commonly occupied by pancreatic cysts, associated with fatty stools, pale, bulky stools and with glycosuria, the diagnosis is fairly certain.

Prognosis. This is not good. Without treatment the disease causing the cyst usually progresses or the continued pressure of the cyst causes atrophy of the gland substance with diabetes resulting. Rupture of the cyst may occur with fatal peritonitis resulting. Occasionally these cysts become affected resulting in sepsis.

Treatment. Three methods of treatment have been tried. First, aspiration of the cyst contents. This is ineffectual and the dangers incident to such a procedure should condemn it.

Complete extirpation of the cyst is of course the ideal treatment. This is

rarely possible however, because of the difficulties due to adhesions and the danger of serious hemorrhage. Pedunculated cysts of the tail of the pancreas lend themselves more readily to this kind of treatment.

Incision and drainage gives the most satisfactory result. The edges of the incision in the cyst wall are sutured to the wound in the parietal peritoneum or fascia and gauze or tube drainage provided.

In 138 cases collected by Mayo Robson and Cammidge treated by incision and drainage the mortality was 11.6% and in 15 cases of excision it was 20%. They say however, that the mortality following drainage should be reduced one-half.

The cases to be reported occurred in Dr. Guerry's clinic in Columbia, and I wish to thank him for the privilege of reporting them.

Case 1. A married woman, age 39, housewife, admitted November 27, 1915. Complaint, abdominal tumor and pain. Family history unimportant.

Previous diseases. Numerous attacks of malarial fever. Typhoid fever eleven years ago, was sick six weeks, no complications. Married thirteen years, six children, oldest eleven years, youngest sixteen months. Confinements normal, no mis-carriages. When she was nineteen years old she noticed a "lump" in her left side about the level of the iliac crest. This caused no particular discomfort and in two years had apparently disappeared. Ten months ago, six months after the birth of her last child, this tumor reappeared and has gradually grown larger and has caused more pain. At intervals there has been a definite decrease in the size of the tumor. For several days past she has suffered considerable more from pain and the tumor has been larger and more ten-

der. Since last menstruation three weeks ago has been bleeding rather freely. Has had no symptoms referable to the urinary system.

Examination was negative except for the presence of a smooth rounded, resilient tumor occupying the left side of the abdomen and extending up almost to the costal border and as low as the anterior superior iliac spine. The tumor cannot be displaced much in any direction. Urine and blood examination were negative. Temperature not above 99 degrees.

At operation a cyst containing about a gallon of fluid was found, with a pedicle about three inches long which had become twisted. It was adherent to several loops of small intestine and to the transverse colon and over its anterior surface to the parietal peritoneum. Complete extirpation was done. These adhesions were apparently of recent formation and were attributed to the twisting of the pedicle and resulting interference with the blood supply to the cyst.

Unfortunately the specimen was destroyed before a close examination of it could be made.

In this case a tentative diagnosis of ovarian cyst with twisted pedicle was made. She was discharged in three weeks and when heard from about two months ago was in good health.

The second case occurred in a college student, age 20 years. Had never been seriously sick. Had enjoyed good health and taken a prominent part in athletics. He was admitted to the Columbia Hospital December 23, 1916. Complaining of severe epigastric pain and with a smooth, resilient tumor mass occupying the lower part of the epigastric and extending to the left under the costal border and down as low as the umbilicus.

On November 25, 1916 in a football game while attempting to tackle an

opposing player he was struck a severe blow in the epigastrium by his opponents knee. This knocked the "wind out of him" as he expressed it, but after a few minutes entered the game again and felt all right except for being a little weak.

Two hours later on attempting to eat dinner, almost at the first mouthful, he began having severe cramps in the epigastrium. The pain continued through the night and had to be relieved by an opiate. The next day he vomited a good deal. His pain and vomiting were closely related to his attempts to take food.

His pain gradually decreased and in three or four days was gone. He remained in bed two weeks. He had no fever during this time and did not vomit any blood. He was up three or four days, eating well and with no pain. After a good deal of automobile riding another attack began, was like the first attack and he was in bed a week. He got up again and two days later after a long automobile ride was taken sick again with an attack like his previous ones.

Two weeks after his injury a fullness developed between the stomach and liver which his physician thought was a tumor and probably connected with the liver. After three or four days this fullness entirely disappeared and two days later appeared in its present location and rapidly increased in size. His urine was also negative.

At operation on December 23rd a tense fluid tumor was found between the stomach and transverse colon, the greater part of the stomach covering the upper part of the cyst and firmly adherent to it and the colon adherent over the lower part of the cyst. The gastro-colicomentum could not be removed from the anterior surface of the cyst.

The cyst was incised, the cavity

cauterized as extensively as possible with the actual cautery and gauze and tube drainage provided after suturing the edges of the cyst to the wound in the parietal peritoneum.

After operation he suffered as before when he attempted to take fluids. When the drains were removed his convalescence was smooth and rapid. There was no excoriation of the skin about the wound and the absence of pancreatic ferment was assumed.

The fluid in the cyst was clear, almost colorless and there was no evidence of previous hemorrhage. I saw this patient a few days ago and he had regained his usual good health and wanted to know if he could play football again this fall.

The third case occurred in a single woman, 23 years of age. Unfortunately her record could not be found. She was admitted and operated on in December '14. She had during the preceding summer an illness with fever for several weeks which was pronounced typhoid fever. She had no fever on admission and was complaining of a tumor in the upper abdomen, and of pain.

This tumor was situated in the epigastrium and extended to the left under the costal border and had been diagnosed by several physicians as an enlarged spleen. The physician who examined her at the hospital distended the stomach and colon with air and found that the tumor appeared most prominently between them. He also aspirated the cyst and the fluid obtained contained the proteolytic and diastatic ferments.

At operation which consisted in incision and drainage, a small area of fat necrosis was observed in the omentum covering the cyst at the point where the cyst was aspirated.

Convalescence was uneventful.

ABDOMINAL PAIN.

By B. B. Steedly, M. D., Spartanburg,
S. C.

EVERY large proportion of all patients have as one of their complaints abdominal pain, therefore a consideration of this symptom should be profitable to all medical men.

While I presuppose a fundamental knowledge of the topography and relative position of the organs contained within the abdomen, together with the physiology of the nerve mechanism concerned in transmitting painful sensations from the viscera to the central nervous system, there are certain phases of this to which I desire to particularly direct your attention now.

Whereas, the spinal nerves ordinarily connect directly with the parts which they supply, it is different when they come to supply the viscera. Here the sympathetic system is interposed. This arrangement is for the diffusion of impulses, which is made possible by the fact that one efferent spinal nerve fiber may connect with several nerve cells in a sympathetic ganglion. These latter, through their axis cylinder processes, are capable of a much wider distribution than would be possible without such a system.

While the sympathetic constitutes the chief nerve supply of the abdominal organs, certain spinal and notably one cranial nerve send fibers directly to them. For example the vagi, which together with the sympathetic supply the stomach, also supply fibers to the gallbladder and greater part of the intestines. By reason of this extra vagus supply to the gallbladder and small intestine, pain originating in these organs is not infrequently referred to the abdominal organ chiefly supplied by the vagi, viz., the stomach.

Hence such pains as these are spoken of as **referred** pains, or **reflex** pains.

Closely related to the referred pains are the so-called transferred or sympathetic pains, which are felt at some point on the skin instead of in the internal organ, which is the source of the pain. This transference of the pain is explained on the ground that both the skin area and the organ involved receive their nerve supply from the same segment of the spinal cord and that the pain is often felt in the part of higher sensibility, that is, the skin rather than in the part of lower sensibility, to which the stimulus is actually applied. We speak of the internal organs as being of lower sensibility because they possess only the common sensation of pain and are devoid of tactile and temperature sense.

Another very interesting clinical observation in regard to pain is its incomplete localization. While sensations of touch and of heat and cold are referred by the mind to almost the exact point of contact, the localization of painful stimulus is not so definitely circumscribed. This is especially true of intense pains, slight pains being interpreted with a greater degree of accuracy. These observations apply throughout the body, but are more pronounced in the case of the internal organs. A familiar example of this incomplete localization is severe intestinal colic in which the pain is complained of as being nearly all over the abdomen, the irritation proceeding from only a small part of the intestine, whereas, on the other hand a mere twinge of pain in the abdomen is easily assigned to a fairly circumscribed area.

Thus it is seen that in the interpretation of abdominal pain there are various misleading and confusing factors,

viz., diffusion of pain, referred or reflex pain, sympathetic pain, and incomplete localization of pain. These should ever be borne in mind. Fortunately the tenderness or pain elicited on palpation leads us more correctly to the region involved, and, if pressure upon an organ gives rise to pain of the same character as the spontaneous pain complained of, such organ may be safely considered the seat of the lesion.

If a patient complains of pain he naturally refers it to some definite part which we designate according to the usual names given the subdivisions of the abdomen made by imaginary planes passing through it from lines drawn on the surface. A simple example of this is the drawing of one vertical line passing from the ensiform cartilage through the umbilicus to the symphysis pubis, and a horizontal line at the level of the umbilicus, and ending on either side at, or a little anterior to the highest point of the iliac crests. The anterior portion of the abdomen is thereby divided into four regions, the right and left upper, and the right and left lower, quadrants. The upper quadrants are limited laterally by the continuation downward to the iliac crests of the midaxillary line and the lower quadrants by the portions of the iliac crests anterior to the midaxillary lines and Poupart's ligaments. There are two posterior abdominal regions, each limited externally by midaxillary lines internally by the spinous processes of the lumbar vertebrae, above by the margin of the thorax, and below by the crests of the ilia and the iliolumbar ligaments. It must be borne in mind that these upper and lower boundaries are only superficial demarcations and by no means coincide with the deeper boundaries.

This subdivision is not intended to replace those of Cunningham and others which divide the abdomen into nine regions but is only offered as an additional convenient one, useful in recording histories. Furthermore it is not applicable in all cases, since patients frequently refer their symptoms to the middle portion of the abdomen, instead of to one of the quadrants, when it becomes necessary to make use of the familiar terms, epigastric, mesogastric, and hypogastric regions. Further than the consideration of these regions as such, one should have a broad knowledge of the important landmarks of the body, not so much because certain organs or viscera lie in constant relation to these landmarks, but on account of the fact that they are important points of departure in the localization of the deeper structures. Hence in palpating, it is necessary to keep clearly in mind the anatomical location of all the viscera. Thus the pylorus lies in the transpyloric line, which is a horizontal line drawn around the body half way between the symphysis pubis and the suprasternal notch. The pylorus lies under the line, an inch or more from the median line. Other lines may be drawn for the purpose of locating the viscera but for practical purposes I think it sufficient when dealing with the duodenum and adjacent structures to consider the pylorus as located an inch and a half from the median line and three or four inches above the umbilicus, the gallbladder under the ninth costal cartilage—the latter is easy to locate if we remember that the tenth costal cartilage represents the lower part of the thorax in front. The termination of the first part of the duodenum underlies the ninth right cartilage but more deeply placed under the neck of the gallbladder.

One should be so familiar with the exact location of the viscera as to be able to have a clear cut mental picture of the proper perspective of all viscera underlying any surface area of the abdomen which he may be examining.

The next point in the general consideration of pain is as to whether or not it is continuous or intermittent and if the latter, how long are the intervals and with what regularity do the attacks recur.

The quality or character of the pain requires attention. If it be crampy or colicky, the natural inference is that it involves a hollow viscus and that there is a hindrance to the normal movement of its contents,—such as the stomach, intestines, gallbladder or pelvis of kidney or ureter, and a study of the location will suggest which organ. The pain may be a severe burning sensation frequently found in gastric or duodenal ulcer, a dull aching common to carcinoma, or a dragging sensation found in movable kidney. The severity of the pain has a double dependence,—the extent of the painful stimulus and the sensitiveness of the patient. This last factor, is so dependent upon the psychical characteristics of the patient that it makes it impossible to accurately measure the amount of pain present,—for the nervous system of one might be so hypersensitive that what they would consider as intense agony, might be quite endurable by another. The majority of these patients do not intend to practice deception but simply perceive the painful sensation in a greatly magnified form. A certain number are true malingerers.

Another point to be considered is what circumstances influence the onset or cessation of the pains. Frequently it occurs a definite time after the taking of food and varies with the differ-

ent affections, and as to the character of the food taken. Indeed some unirritating albuminous foods often relieves the pain of ulcer by combining with the acids.

Another circumstance which influences the pain is the position, upright, horizontal, lateral, etc., and increases the pain by traction on adhesions produced by localized peritonitis in inflammatory troubles.

Oftentimes much light can be thrown on abdominal pain by its behavior under the use of drugs. If severe epigastric pains are relieved by alkalies, it at least shows the lesion to be in the stomach, whether an ulcer or a simple hyperacidity in a hypersensitive stomach, or the relief afforded by the starting of eructations in obstruction of the pylorus with accumulation of gas, can be determined by a consideration of the case as a whole. Likewise if a local anesthetic taken into the stomach relieves the pain in a few minutes, the same conclusion would be justifiable.

The X-Ray is a most valuable adjunct in the study of pain in the hollow viscera, for in fluoroscopic examination of a patient with a constant filling defect of the stomach, or a deformity of the duodenal cap associated with a demonstrable interference with the normal motility of the stomach, and its time of evacuation,—if one is able to establish the previously complained of pain or tenderness, the exact location of the trouble in any viscus may be seen.

Lastly, accompanying manifestations are most important aids in differentiating abdominal diseases. For example abdominal pain accompanied by diarrhoea suggests the presence of some irritating food material or a beginning dysentery. Severe pain in the lateral portions of the abdomen or back ac-

companied by irritability of the bladder and tenderness of testicle of same side, almost surely means kidney colic. Abdominal pain and vomiting suggests several things. If persistent and sternocarceous-intestinal obstruction, if copious and of short duration, giving relief and having the odor of putrid eggs, or H₂S, it means pyloric obstruction with a dilated stomach.

If the vomitus contains bright red blood especially in large quantities it probably means an ulcer of the stomach. If coffee ground material is vomited it suggests cancer of the stomach.

I shall now briefly consider pain occurring in the various regions of the abdomen without, however, any intention of covering the entire field of ailments to which the abdomen is heir.

Epigastrium: Epigastralgia is common to many diverse affections not only of the stomach itself but as referred pain from organs not contained in the epigastrium. By close attention to the associated phenomena and accompanying manifestations a fairly rapid orientation of the various types is possible. Localized tenderness, especially if the point of maximum tenderness is to the right or left of the median line is strongly in favor of organic disease especially ulcer. If vomiting is present its character should be noted. The early colic of appendicitis while more commonly occurring around the umbilicus, sometimes is referred to the epigastrium,—and biliary colic is as frequently in the epigastrium as in the right hypochondrium. If there be present arteriosclerosis and the pain works somewhat under the lower sternum angina pectoris should be considered, and if the vasodilators give relief, the diagnosis is probably correct. The accompanying phenomenon of a blue line on

the margin of the gums points to Lead poisoning. If painful epigastric attacks is the sole tangible thing that can be discovered, then it must be looked upon as a Simple Gastralgia, caused by Tabes, Syphilis, or some other affection of the Central Nervous System, and corroborative evidence should be sought. Further proof is afforded by failure to influence the pain uniformly by any form of diet or internal local remedies.

Umbilical: In the umbilical region we encounter colic chiefly of intestinal and appendicular origin. Appendicitis almost always begins with colicky pains referred to the middle of the abdomen. Associated and accompanying phenomena are to be followed up as in epigastric colic.

Left Upper Quadrant: Pain in the left upper quadrant usually has its origin in stomach, splenic flexure and descending colon, that is more particularly if it be colic in character, otherwise the spleen must be considered. The individual lesions will be ulcer of the stomach and obstructive conditions, mostly malignant, in colon,—distal to the splenic flexure.

In the Lower Quadrant of this side the sigmoid flexure is the chief organ and may be the seat of volvulus, a diverticulum, a new growth, or colitis. The physical examination and accompanying phenomena will make the diagnosis in most cases.

Pain in the Region of the Hypogastrium and Pelvis has to do with affections of the urinary bladder and pelvic viscera, and the bimanual examination possible in this part of the body together with cystoscope examination make their diagnosis easier than upper abdominal troubles.

We turn now to the right side of the abdomen, the bugbear of both internists and surgeons. We will con-

sider two regions, the right upper and right lower quadrants, and take as a starting point the most commonly affected organ in each of these regions, and use it as the basis for a differential diagnosis from other conditions presenting similar symptoms.

The Gallbladder occupies the most imposing position of any of the organs of the upper right portion of the abdomen, being located rather superficially and projecting slightly beyond the anterior border of the liver, underlying the ninth right costal cartilage.

Pain in bladder disease varies in character and intensity from a dull aching observed in mild choleystitis to colic and cutting pains when there is a sudden hindrance to the egress of its contents. While the character of the pain gives a probable idea as to the nature of the trouble (colic pains indicating gallstones), experience teaches that about one out of every six or seven patients who complain of colic pains are found to have no gallstones. Conversely, stones have been found in about three fourths of the patients who had only the dull aching pains.

A sense of tightness or constriction across the epigastrium is considered by some as being characteristic of gallstones, and a valuable aid in the differentiation from other lesions of the abdomen.

The location of pain originating in the gallbladder may be said to be in the gallbladder region and in the epigastrium. So often are so-called stomach symptoms referable to gallbladder disease that we have learned in recent years to consider seriously the possibility of the latter in all cases of long-continued indigestion accompanied by distress in the stomach and more especially if the symptoms occur

from three to four hours after eating, when the normal contractions of the gallbladder are known to take place. If these attacks of indigestion are separated by days or weeks of comparative freedom from same, it is all the more indicative of gallbladder disease. Gallbladder pains are also commonly referred to the region of the right scapular and less often to the right shoulder and appendix region. Tenderness over the gallbladder usually accompanies disease of this organ, and is best elicited by placing the fingers deeply under the gallbladder and requesting the patient to inspire. The most likely affection to be confused with gallbladder disease are gastric and duodenal ulcer, nervous gastralgia, gastric and hepatic carcinoma, inflammatory conditions of the liver, pancreatic disease, and intestinal colic. So far as the pain is concerned, it may be very similar, but the following differences have been noted:

In gastric ulcer the pain is more distinctly aggravated by taking solid food, though liquid food and especially albuminous liquids often relieve the pain by diluting the hyperacid contents of the stomach, whereas, when gallbladder pain is induced by taking food, there is no special difference between the effects produced by solids and liquids, and the pain in gallbladder disease is never relieved by taking food of any kind. As to the time of occurrence, this varies, but in pyloric ulcer and especially duodenal ulcer and gallbladder disease, it is more apt to occur from two to four hours after eating. The point of greatest tenderness, however, is different in these three conditions. In gallbladder disease it is just below the lower border of the ninth right costal cartilage and is altogether less marked than in ulcer. In gastric ulcer it is in the median

line just below the ensiform cartilage, sometimes to the left of this point, or in the transpyloric line, and posteriorly one inch to the left of the spine, between the tenth and twelfth dorsal vertebra. In duodenal ulcer it is usually over the right edge of the bodies of the first and second lumbar vertebra, though it is frequently only in the median line, and often in gastric or duodenal ulcer the tenderness is diffuse over the epigastrium. So that, notwithstanding these points of difference, duodenal ulcer especially is frequently mistaken for gall stones. This would naturally be expected on account of the close anatomical relationship of the first two or three inches of the duodenum to the gall-bladder, and it is in this part that at least ninetenths of duodenal ulcers occur.

Nervous gastralgia gives rise to spasmodic, burning pain, independent of taking food, often relieved by the latter or by pressure upon the stomach.

Carcinoma of the stomach or liver gives sensations of weight and continuous sensations of dull, ill defined epigastric and hypochondriac pain with moderate tenderness over the lesion. Paroxysmal pain is occasionally observed.

In absence of the liver the pain and tenderness are felt over the liver proper. The character of the pain is that of diffuse soreness. The accompanying symptoms and physical signs are usually sufficient to make the diagnosis clear.

Pancreatic calculi and acute pancreatitis produce sudden, sharp, epigastric pain, which is with great difficulty distinguished from other acute conditions of this region.

In intestinal colic the pain is felt chiefly about the umbilicus and radiates in various directions.

Of course in differentiating these conditions the associated phenomena is of material assistance, but other than to elucidate the subjective symptoms of pain or tenderness is not the province of this paper.

The most frequent source of trouble in the lower right quadrant of the abdomen is the appendix. Appendicitis gives rise to pain which at first centers around the umbilicus, but which is later localized in the right iliac fossa. There are cases, however, in which from the beginning the pain is confined to the right iliac region. The character of the pain is nearly always sudden and cramplike, though occasionally it amounts to only a dull aching, and may even be absent, as is sometimes observed in gangrenous forms. Palpation reveals tenderness over a circle a few inches in diameter, which usually has as its center McBurney's point. In chronic appendicitis the patient complains of an uneasiness or slight soreness in the appendix region, which is subject to acute exacerbations following slight causes, such as indiscretions in diet, collections of feces in the cecum, or muscular exertion.

On account of the similarity of the pain in certain other affections to that of appendicitis it has to be differentiated from the following:

1. Appendicular colic, in which the pain is identical, but, there being no inflammatory reaction, the tenderness is less marked.

2. Enteralgia, dependent upon a neurotic or hysterical condition or on tabes. In this the pain is usually diffuse, but is most intense in the umbilical region.

3. Intestinal colic, due to the presence of irritating substances in the intestine. This is characterized by severe paroxysmal pain, most intense

in the umbilical region, but showing more of a tendency to radiate in different directions than in simple enteralgia. The radiation follows the advancing peristaltic movement and the sensation of shifting of intestinal gases is felt. There is no tenderness on pressure, but, on the contrary, it often seems to afford some relief.

4. Intestinal obstruction, the pain in this condition is like that in the early stages of appendicitis and intestinal colic. Later, in the course of these affections, other symptoms and signs are added which make the differentiation easy.

The last region for consideration is the posterior abdominal, which contains as its chief organ the kidney.

Kidney pains referred to this region or, as it is commonly called, to the loin or small of the back, and varies in intensity from a feeling of discomfort or dull aching, accompanying a slightly movable kidney, or benign tumor, through the somewhat greater disturbance due to the passage of small sand, to the intense suffering of renal colic, consisting of paroxysms of agonizing, dragging pain in the loin of the affected side. Pain in the kidney, while having its greatest intensity in the loin, has a definite course of radiation, which is from the loin, following the course of the ureter, sometimes to the bladder, but usually to the groin, testicle and under side of the thigh. This radiation corresponds to the distribution of the ilio-inguinal nerve, but also sometimes includes that of the anterior and genitocrural nerves. Exercise increases the pain of renal calculus. Palpation usually reveals tenderness just below the last rib, especially when assisted by counter pressure from in front.

Renal Colic, while commonly due to the passage of a calculus, may be

caused by anything which produces a sudden blocking of the ureter, such as a twisting of a pedicle of an abnormally movable kidney, (Dietl's Crisis) or the passage of a lump of mucus, pus or blood clot.

Pain and tenderness in the loin are symptoms of acute inflammation of the kidney, such as pyelitis, pyelonephritis, pyelonephrosis, and perinephritic abscess. In these the pain is of a stretching character, there is marked tenderness on pressure, and in the severer types the slightest movement of the body increases the suffering.

Similar but less marked pain characterizes tuberculosis of the kidney, but the difference in the constitutional symptoms and examination of the urine serve to differentiate these affections.

Perinephritic inflammation exhibits superficial tenderness, whereas inflammation of the kidney itself exhibits tenderness only on deep pressure, and, perinephritic abscess is most marked according to Johnson, the tenderness of posteriorly, just below the last rib while the tenderness of a true renal suppuration is most marked in front.

Lastly, we must differentiate myalgia. I use this symptomatic term to cover a large group of cases showing pain in the muscles or fascia whether its origin be diabetic, rheumatic, neuralgic, or be due to a strain or exposure to cold. It is my opinion that the majority of patients who complain of pain in the posterior abdominal region are afflicted with myalgia, or as it is popularly known, lumbago.

By always bearing this common condition in mind it ought rarely, if ever, be mistaken for anything else. The more superficial location of the pain, its evident dependence on bringing into action the muscles of the loin and lower part of the back, together with

the absence of constitutional and urinary symptoms make a characteristic picture.

I did not mention myalgia as a cause of pain in the anterior abdominal

regions because of its infrequent occurrence. It, however, should be borne in mind as it is occasionally seen.

SOCIETY REPORTS

COLUMBIA.

The Columbia Medical Society met in regular session Monday night, December 10, 1917. Meeting called to order by the president, Dr. LeGrand Guerry. Minutes read and approved.

A beautiful silver loving cup was presented by the society to Dr. L. K. Philpot for 19 years of free service rendered the Door of Hope. Rev. J. M. Pike one of the founders made the presentation speech. Dr. Philpot came forward in his modest way taken very much by surprise. Stated that he had rendered his services as his duty with no expectation of reward. The reason for giving up the work being the necessity for conserving his physical resources. Thanking Dr. Pike and the society he took his seat.

Dr. Simpson representing the United States Public Health Service in Columbia was presented by Dr. Fishburne. Stated that their object was to assist local health officials with eradication of malaria, assist with local ordinances, ascertain the prevalence of communicable diseases, removal of unsanitary conditions, medical inspection of schools, control of venereal diseases, etc. Dr. Simpson closed by asking the moral support of the society in their undertakings.

Dr. Johnson made a few remarks relative to the benefits that might be derived from the establishment of a venereal clinic.

In accordance with the custom of the society we proceeded with the election of officers for the following year: Dr. C. L. Kibler was elected president on the first ballot. Dr. George H. Bunch vice-president. Dr. Edythe Welbourne Secretary-treasurer.

Delegates and censors to be elected at January meeting.

Adjournment.

Edythe Welbourne, M. D., Secretary.

COLUMBIA.

The Columbia Medical Society met at the Columbia Hospital in November, Dr. Guerry in the chair.

Program opened with clinical reports. Dr. Sparkman reported a case of ectopic pregnancy which was operated upon by Dr. Guerry with the following findings: left ectopic pregnancy with early rupture of right tube. Specimens demonstrated before the society.

Dr. Heyward Gibbes presented a well prepared article on the subject of Reflex Pyloro Spasm. He divided the subject into two types, intra gastric and extra gastric disturbances. Stated that gastric investigation meant the investigation of the entire patient. He reported several cases in which the bismuth test was made showing the X-ray findings. In closing the doctor referred to the stomach as a barometer indicating the advisability of looking elsewhere, and that usually an ex-

ploratory operation was indicated. Discussion by Dr. R. W. Gibbes, Dr. N. B. Heyward, Dr. C. L. Kibler, and Dr. F. M. Durham. Dr. Guerry continued the discussion referred to his visit with the Mayos where he saw 10 cases of carcinoma of the stomach which had been diagnosed by the X-ray previous to operation. It was suggested to his mind that we should be more accurate in our diagnosis of cancer.

Dr. N. B. Edgerton presented an interesting article entitled Urinary Lithiasis which he illustrated by charts. He noted the three points of constriction along the course of the ureter where stones might become lodged. As to the disposition of stones stated that a certain per cent were passed by the patient, some removed by means of the operating cystoscope, etc. Article discussed by Dr. W. R. Barron and Dr. R. W. Gibbes.

Talks by Dr. G. H. Bunch, My visit to the Clinics in New York; Paper by Dr. Mikell, Is a General Anesthetic Necessary in Adult Tonsillectomies? postponed until January meeting.

Dr. W. R. Barron the chairman of the committee on entertainment of the Camp Jackson physicians made a few remarks relative to smoker to be given them this winter.

The Columbia Medical Society went on record as endorsing the activities

of the Board of Charities in petitioning the city of Columbia to take steps for the establishment of a General Medical Clinic. Chair appointed the following committee: Dr. W. R. Barron, Dr. Heyward Gibbes, Dr. S. B. Fishburne.

Adjournment to the hospital dining room where a banquet was spread for the enjoyment of the medical society and the visiting physicians.

Edythe Wilbourn, M. D. Secretary.

LAURENS.

The October meeting of the Laurens County Medical Society was held in Laurens with a splendid attendance. Dr. W. F. Pace of Gray Court addressed the Society on the subject of "Pellagraous Insanity." His paper was generally discussed by all the physicians present.

Dr. W. H. Dial of Laurens, in his usual happy and characteristic style addressed the society on "The Physicians Duty in War Times. His remarks were well received and roundly applauded.

At the November meeting also held in Laurens, Dr. B. B. Steedly of Spartanburg delivered a splendid address on "Abdominal Pain." Dr. Steedly's paper will be published in the Journal in full at a future date.

J. M. Bearden, Secretary.

BOOK REVIEW

HISTORY OF MEDICINE (Second Edition Revised and Enlarged.)

HISTORY OF MEDICINE, Suggestions for study and Bibliographic Data, By Fielding H. Garrison, A. B., M. D., Principal Assistant Librarian, Surgeon General's Office, Washington, D. C., Second edition revised and enlarged. Octavo of 905 pages with many portraits. W. B. Saunders Company, Philadelphia and London, 1917. Cloth, \$6.50 net; Half Morocco, \$8.00 net.

Garrison's History is destined to become one of the most practical books for the use of the student or practitioner yet available. This is the second edition, the first having been issued in 1913. This edition has been thoroughly revised and brought up to date and includes historical matter even only a few months old. It is not intended to be exhaustive as it is a book of only nine hundred and five pages. For the student or the busy practitioner, however, we believe no work published hitherto will prove of such ready reference. The author has had the great advantage of being principal assistant Librarian of the Surgeon General's Library in Washington, one of the greatest medical libraries in the world. The publishers have presented the volume attractively, well bound and on good paper with excellent illustrations.

THE SURGICAL CLINICS OF CHICAGO. December, 1917. Volume 1, Number 6. With 89 Illustrations. Index Number Published Bi-Monthly, W. B. Saunders Company, Philadelphia and London.

Among the interesting articles of this volume are the following:

Clinic of Dr. Dean Lewis, Presbyterian Hospital.

Separation of the Lower Epiphysis of the Femur with Anterior Displacement and T-Fractures.

Myositis Ossificans Developing in a Clean Abdominal Wound.

Blastomycosis and Sporotrichosis.

Clinic of Dr. Albert J. Ochsner, Augustana Hospital.

Actinomycosis of the Colon; Ileosigmoidostomy; Treatment of Actinomycosis.

Carcinoma of the Rectum—Excision—Transplantation of Sigmoid into Perineum Technic of Operation.

Clinic of Dr. C. Henry Davis, Presbyterian Hospital.

Clinical Talk on Anesthesia in Gynecology and Obstetrics.

Clinic of Dr. Frederic A. Besley, Cook County Hospital.

Fractures.

Clinic of Dr. Kellogg Speed, Cook County Hospital.

Right Upper Quadrant Appendicitis.

DISEASES OF THE CHEST AND THE PRINCIPLES OF PHYSICAL DIAGNOSIS. Diseases of the Chest and the Principles of Physical Diagnosis, by George W. Norris, M. D., Assistant Professor of Medicine in the University of Pennsylvania, and Henry R. M. Landis, M. D., Assistant Professor of Medicine in the University of Pennsylvania, with a chapter on the Electrocardiograph in Heart Disease, by Edward B. Krumbharr, Ph. D. M. D., Assistant Professor of Research Medicine in the University of Pennsylvania. Octavo volume of 782 pages with 413 illustrations. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$7.00 net. Half Morocco, \$8.50 net.

This book is rather out of the ordinary. The subject of diagnostic accostics has especially been emphasized. We know of no work which contains so many illustrations from the frozen cadaver showing the anatomic relations. There is an interesting chapter on the heart and the electro cardiograph, a subject which has attracted the attention of the medical world in recent years.

FOOD FOR THE SICK. A manual for Physician and Patient. By Solomon Strouse, M. D., Associate Attending Physician, The Michael Reese Hospital; Professor of Medicine at the Post-Graduate School Chicago, and Maude A. Perry, Dietitian at the Michael Reese Hospital, Chicago. 12mo of 270 pages. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$1.50 net.

Most books treating the subject of diet are either too simple or too complicated. In this instance, however, the author has avoided the shortcomings mentioned above and we believe has given a splendid book on food for the sick.

A CLINICAL TREATISE ON DISEASE OF THE HEART FOR THE GENERAL PRACTITIONER. By Edward E. Cornwall, Ph. B., M. D.

Attending Physician, Williamsburgh and Norwegian Hospitals; Consulting Physician, Bethany Deaconesses Hospital; Formerly Professor of Medicine, Brooklyn Post-Graduate Medical School; Fellow of the American College of Physicians, The American Congress on Internal Medicine, and The American Medical Therapeutic Society, etc. New York, Rebman Company, 1917.

The Author maintains that he has really given us a book which the general Practitioner may read with both pleasure and profit and the reviewer is of the opinion that such is the case. While nothing especially new has been contributed, yet the whole subject is cleverly presented and will certainly prove refreshing to the memory of the busy doctor.

Under the head of General Therapeutics part two we find the Author emphasizing the great importance of rest as a remedy of value in treatment of diseases of the Heart. While this is not a new idea in general practice, it is probable that rest is not made use of often times as it should be. The matter of diet is also given close attention. The Author appears to have given Strophanthus long and careful study and says that strophanthus compares favorably with digitalis. It has a special advantage in its freedom from accumulation. It seems to be capable of doing nearly every thing that digitalis can do and some things that it can not do. The Author advises very small doses as a rule. We heartily commend the volume as being above the average monograph on the subject.

THE PRACTICAL MEDICINE SERIES.
Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the general editorial charge of Charles L. Mix, A. M., M. D. Professor of Physical Diagnosis in the Northwestern University Medical School.

VOLUME VII. OBSTETRICS. Editor by Joseph B. De Lee, A. M., M. D. Professor of Obstetrics Northwestern University Medical School with the Collaboration of Eugene Cary B. S., M. D. Assistant Gynecologist, St. Luke's Hospital; Instructor in Gynecology, Northwestern University Medical School.

Series 1917. Chicago, The Year Book Publishers 608 S. Dearborn St. Price \$1.35.

THE PRACTICAL MEDICINE SERIES.
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VOLUME VII. PHARMACOLOGY AND

THERAPEUTICS. Edited by Bernard Fantus, H. S., M. D. Associated Professor of Medicine, Subdepartment of Therapeutics, Rush Medical College, Chicago, Ill.

PREVENTIVE MEDICINE Edited by Wm. A. Evans, M. S., M. D., LL.D., P. H. D Professor of Preventive Medicine, Northwestern University Medical School. Series 1917. Chicago, The Year Publishers, 608 Dearborn St. Price \$1.50..

IMPOTENCE AND STERILITY with Aberrations of the Sexual Function and Sox-Gland Implantation by G. Frank Lydston, M. D., D. C. L. Price \$4.00. Sold by Subscription only. Send postage prepaid on receipt of subscription price. Riverton Press, Chicago.

The Author is well known in his specialty and has given numerous articles to the literature as well as having published other books on this subject. He states that he believes there is still room for another monograph and takes this opportunity to present in permanent form his hormone theory of aberrations of sex development and functions, etc. The book is not only of value to the Medical Profession, but also to the Legal Profession.

THE PHYSICIANS VISITING LIST.
(Lindsay & Blakiston's.) For 1918 Sixty-seventh Year of its Publication. Philadelphia, P. Blackiston's Son & Co. (Successors to Lindsay & Blackiston.) 1012 Walnut Street. Sold by all Booksellers and Druggists.

This is one of the popular account books published for many years now and has been brought strictly up to date in every detail. To the physician who has been accustomed to the sign system of bookkeeping we know of no superior book on the market.

THE MEDICAL CLINICS OF NORTH AMERICA, November, 1917. Published Bi-Monthly by W. B. Saunders Company, Philadelphia and London. Volume One, Number Two.

Among the interesting articles in this number are the following:

Contribution by Prof. Graham Lusk, Cornell University Medical College. Cataract in Common Life.

Clinic of Dr. Charles Gilmore Kerley, New York Polyclinic Hospital. Apparent and Real Appetite Defects in the Young.

Clinic of Dr. Arthur F. Chance, Post-graduate Medical School and Hospital Diet in Interstitial Nephritis.

Contribution by Dr. Rufus I. Cole, From the Hospital of the Rockefeller Institute for Medical Research, New York, City.

The Treatment of Lobar Pneumonia.

Clinic of Dr. Homer F. Swift, Presbyterian Hospital. Rheumatic Fever.

Clinic of Dr. Alfred F. Hess, Home for Hebrew Infants. Vaginitis (Cervicitis) in Infants.

Clinic of Dr. Walter L. Niles, Bellevue Hospital.

Meningitis. Three Cases: Two of Meningococcic and One of Staphylococcic. Origin.

Clinic of Dr. Arthur L. Holland, Cornell University Medical College.

The Fluoroscopic Method of Diagnosis in Digestive Disease.

TECHNIC OF THE IRRIGATION TREATMENT OF WOUNDS by the Carrel Method. By J. Dumas & Anne Carrel. Authorized Translation by Adrian V. S. Lambert, M. D. Acting Professor of Surgery in the College of Physicians and Surgeons (Columbia University) New York. With an Introduction by W. W. Keen, M. D., L.L.D., F. R. C. S. (Hon.)

PAUL B. HOEBER

New York.

CARREL:

We confess our incompetency to review this book in the light of either experience or extensive observation and therefore, the introduction as written by Dr. W. W. Keen, of Philadelphia, November, 1917, will not be inappropriate:

INTRODUCTION.

Alexis Carrel's genius has been shown in many remarkable ways and has already received the hull-mark of a Noble prize.

But now he has done a still greater practical service to humanity in the new and wonderfully successful technic in treating war wounds by means of Dakin's Solution. A colleague, M. le Dr. J. Dumas, and Dr. Carrel's devoted and talented wife—truly a helpmate, who has been so valiant an assistant in all his researches both in this country and in France—have amplified the details of this treatment in a small brochure to which, in its English translation, it is a genuine pleasure for me at the request of the publisher to furnish this brief introductory note. Every surgeon in the various military and naval forces and also those in civil life who have to do with industrial and other accidental wounds should know this technic by heart and practice it with exactness. They will be rewarded by a most gratifying success.

William W. Keen.
Philadelphia, November, 1917.

ROLL OF MEMBERS

ROLL OF MEMBERS OF THE SOUTH CAROLINA MEDICAL ASSOCIATION.

Anderson County.

H. H. Acker, Anderson, S. C.
W. F. Ashemoore, Anderson, S. C.
H. M. Babb, Honea Path, S. C.
W. C. Bowen, Belton, S. C.
B. F. Brown, Williamston, S. C. (Honorary.)
D. A. Burris, Iva, S. C.
C. S. Breedin, Anderson, S. C.
R. F. Divver, Anderson, S. C. (Honorary.)
W. R. Dendy, Pelzer, S. C.
M. H. Daniels, Anderson, S. C.
S. C. Dean, Anderson, S. C.
E. R. Donnald, Honea Path, S. C.
J. P. Duckett, Anderson, S. C. (Honorary.)
E. E. Epting, Williamston, S. C.
J. L. Gray, Anderson, S. C.
C. L. Guyton, Williamston, S. C.
H. H. Harris, Anderson, S. C.
W. R. Haynie, Belton, S. C.
B. A. Henry, Anderson, S. C.
J. M. Holcombe, Belton, S. C.
J. M. Hobson, Townville, S. C.
V. N. Kay, Anderson, S. C.
J. N. Land, Starr, S. C.
J. E. McCleskey, Anderson, S. C.
J. C. Milford, Belton, S. C.
W. H. Hardin, Anderson, S. C.
W. H. Pepper, Anderson, S. C., R. F. D.
H. A. Pruitt, Anderson, S. C.
Olga V. Pruitt, Anderson, S. C.
C. F. Ross, Anderson, S. C.
R. L. Sanders, Anderson, S. C.

J. O. Sanders, Anderson, S. C.
L. Carl Sanders, Anderson, S. C.
A. L. Smethers, Anderson, S. C.
J. F. Shirley, Honea Path, S. C.
M. A. Thompson, Anderson, (Honorary).
Wade Thompson, Anderson, S. C.
J. B. Townsend, Anderson, S. C.
J. E. Watson, Anderson, S. C.
J. N. Webb, Townville, S. C.
J. O. Wilhite, Anderson, (Honorary).
S. A. Wideman, Townville, S. C.
J. D. Wilson, Iva, S. C.
E. B. Williams, Honea Path, S. C.
J. W. Williams, Honea Path, S. C.
J. R. Young, Anderson, S. C.
C. H. Young, Belton, S. C.

Aiken County:

A. L. Ballenger, Wagenor, S. C.
L. T. Bonnor, Blacksville, S. C.
E. S. Cross, Randolph, S. C.
R. M. Hammond, Montmorenic, S. C.
H. T. Hall, Aiken, S. C.
T. W. Houston, Aiken, S. C.
J. B. McMillian, Granitesville, S. C.
J. C. Pearce, Granitesville, S. C.
T. C. Stone, Aiken, S. C.
M. W. Webb, Wagner, S. C.
H. H. Wyman, Sr., Aiken, S. C.
Harry Wyman, Aiken, S. C.
W. A. Whitlock, Kitchens Mill, S. C.
Hastings Wyman, Jr., Aiken, S. C.

Abbeville County:

J. R. Bell, Due West, S. C.
C. C. Gambrell, Abbeville, S. C.

J. C. Hill, Abbeville, S. C.
 G. A. Neuffer, Abbeville, S. C.
 J. R. Power, Abbeville, S. C.
 J. E. Pressley, Abbeville, S. C.

Bamburg County:

C. F. Black, Bamberg, S. C.
 D. K. Briggs, Blacksville, S. C.
 Robert Black, Bamberg, S. C.
 J. J. Cleckley, Bamberg, S. C.
 J. L. Copeland, Ehahardt, S. C.
 L. H. Hartzog, Olar, S. C.
 J. S. Mathews, Denmark, S. C.
 S. P. Rentz, Branchville, S. C.
 H. J. Stuckey, Bamberg, S. C.
 T. M. Stuckey, Copse, S. C.
 A. S. Weekley, Bamberg, S. C.

Barnwell County:

L. F. Bonnor, Blackwell, S. C.
 R. A. Gyler, Blackville, S. C.
 W. S. Harion, Barnwell, S. C.
 R. C. Kirkland, Barnwell, S. C.
 G. W. S. Loadholt, Jennys, S. C.
 R. A. Lyles, Blacksville, S. C.
 A. B. Patterson, Barnwell, S. C. (Honorary.)
 W. C. Smith, Barnwell, S. C.
 J. G. Wooley, Barnwell, S. C.
 W. J. Young, Fairfax, S. C.

Clarendon County:

E. W. Barron, Manning, S. C.
 W. M. Brockington, Manning, S. C.
 Dr. Carrigan, Summerton, S. C.
 Dr. Davis, Summerton, S. C.
 C. B. Geiger, Manning, S. C.
 S. C. Gunter, Paxville, S. C.
 L. C. Stukes, Summerton, S. C.

Chester County:

R. E. Abell, Richburg, S. C.
 J. C. Caldwell, Rodman, S. C.
 D. A. Coleman, Blackstock, S. C.
 C. E. Crosby, Great Falls, S. C.
 W. B. Cox, Chester, S. C.
 C. A. Crosby, Reeds, S. C.
 G. A. Hennies, Chester, S. C.
 S. Jordan, Richburg, S. C.
 T. B. Kell, Fort Lawn, S. C.
 S. G. Love, Chester, S. C.
 W. M. Love, Chester, S. C.
 H. B. Malone, Chester, S. C.
 C. A. McLurkin, Chester, S. C.
 R. H. McFadden, Chester, S. C.
 H. E. McConnel, Chester, S. C.
 J. B. McKeown, Great Falls, S. C.
 S. G. Miller, Chester, S. C.
 S. W. Pryor, Chester, S. C.
 H. M. Ross, Chester, S. C.
 W. R. Wallace, Chester, S. C.
 M. B. Weeks, Richburg, S. C.
 A. M. Wylie, Chester, S. C.
 J. P. Young, Richburg, S. C.

Calhoun County:

A. R. Able, St. Matthews, S. C.
 L. B. Bates, St. Matthews, S. C.
 T. H. Dreher, St. Matthews, S. C.

J. K. Fairey, St. Matthews, S. C.
 W. L. Pou, St. Matthews, S. C.
 H. A. Raysor, St. Matthews, S. C.
 D. R. Sturkie, North, S. C.
 T. H. Symes, St. Matthews, S. C.
 C. J. Wilber, St. Matthews, S. C.

Colleton County:

Dr. L. M. Stokes, Walterboro, S. C.
 Dr. C. H. EsDorn, Walterboro, S. C.
 Dr. Riddick Ackerman, Walterboro, S. C.
 Dr. H. M. Carter, Smoaks, S. C.
 Dr. E. S. Thompson, Smoaks, S. C.
 Dr. J. C. VonLehe, Cottageville, S. C.

Charleston County:

Roland Alston, Charleston, S. C.
 C. P. Aimer, Charleston, S. C.
 A. E. Baker, Charleston, S. C.
 J. A. Ball, Charleston, S. C.
 L. D. Barbot, Charleston, S. C.
 E. H. Barnwell, Enterprise, S. C.
 E. C. Baynard, Charleston, S. C.
 M. W. Beach, Charleston, S. C.
 E. M. Boykin, Charleston, S. C.
 A. J. Buist, Charleston, S. C.
 J. W. Burn, Charleston, S. C.
 J. H. Cannon, Charleston, S. C.
 F. G. Cain, Charleston, S. C.
 S. R. Cathcart, Charleston, S. C.
 W. P. Cornell, Charleston, S. C.
 H. Deas, Charleston, S. C.
 H. W. De Saussure, Charleston, S. C.
 J. A. Finger, Charleston, S. C.
 James Frampton, Charleston, S. C.
 J. M. Green, Charleston, S. C.
 G. F. Heidt, Charleston, S. C.
 H. P. Jackson, Charleston, S. C.
 E. L. Jagar, Charleston, S. C.
 A. J. Jervey, Charleston, S. C.
 F. B. Johnson, Charleston, S. C.
 W. H. Johnston, Charleston, S. C.
 C. W. Kellock, Charleston, S. C.
 H. S. Kinlock, Charleston, S. C.
 J. J. LaRoche, Charleston, S. C.
 K. M. Lynch, Charleston, S. C.
 J. Maybank, Charleston, S. C.
 D. L. Maguire, Charleston, S. C.
 H. M. Manning, Charleston, S. C.
 McM. K. Kazyek, Charleston, S. C.
 B. K. McInnes, Charleston, S. C.
 G. F. McInnes, Charleston, S. C.
 J. C. Mitchell, Charleston, S. C.
 M. S. Moore, Charleston, S. C.
 G. McF. Mood, Charleston, S. C.
 Lane Mullally, Charleston, S. C.
 H. S. Mustard, Charleston, S. C.
 W. C. O'Driscoll, Charleston, S. C.
 Albert Nathan, Charleston, S. C.
 W. J. Pettus, Charleston, S. C.
 H. M. Parker, James Island, S. C.
 F. L. Parker, Charleston, S. C.
 E. F. Parker, Charleston, S. C.
 W. L. R. Phillips, Charleston, S. C.
 Kivy Pearlstine, Charleston, S. C.
 R. M. Pollitzer, Charleston, S. C.
 W. P. Porcher, Charleston, S. C.
 J. S. Rhame, Charleston, S. C.
 R. B. Rhett, Charleston, S. C.

Edward Rutledge, Charleston, S. C.
 J. E. Scott, Charleston, S. C.
 T. M. Scharlock, Charleston, S. C.
 W. A. Smith, Charleston, S. C.
 H. R. Simons, Charleston, S. C.
 E. H. Sparkman, Jr., Charleston, S. C.
 J. C. Sosnowska, Charleston, S. C.
 C. A. Speissegger, Charleston, S. C.
 A. R. Taft, Charleston, S. C.
 J. F. Townsend, Charleston, S. C.
 J. T. Taylor, Adams Run, S. C.
 J. C. Weiters, Charleston, S. C.
 J. C. Waring, McClellanville, S. C.
 H. P. Wagenor, Charleston, S. C.
 Robt. Wilson, Jr., Charleston, S. C.
 L. A. Wilson, Charleston, S. C.
 G. F. Wilson, Charleston, S. C.
 I. R. Wilson, Charleston, S. C.
 T. P. Whaley, Charleston, S. C.
 T. G. Simmons, (Honorary).

Chesterfield County:

L. E. Bull, Cheraw, S. C.
 R. L. Gardner, Chesterfield, S. C.
 W. A. Gantt, Jefferson, S. C.
 J. H. Harden, Cheraw, S. C.
 R. M. Newson, Ruby, S. C.
 D. G. Teale, Chesterfield, S. C.
 T. E. Wannamaker, Jr., Cheraw, S. C.

Cherokee County:

J. T. Darwin, Gaffney, S. C.
 R. T. Ferguson, Gaffney, S. C.
 A. L. Little, Blacksburg, S. C.
 J. M. Nesbitt, Gaffney, S. C.
 J. G. Pittman, Gaffney, S. C.
 S. B. Sherard, Gaffney, S. C.

Darlington County:

G. W. Belk, Hartsville, S. C.
 S. Beckham, Hartsville, S. C.
 W. A. Carrigan, Society Hill, S. C.
 J. T. Coggshall, Darlington, S. C.
 G. B. Edwards, Darlington, S. C.
 Wm. Eggleston, Hartsville, S. C.
 A. D. Gregg, Society Hill, S. C.
 J. P. Harrison, Hartsville, S. C.
 C. O. Hill, Darlington, S. C.
 T. E. Howle, Hartsville, S. C.
 J. C. Lawson, Darlington, S. C.
 G. W. Pitts, Lydia, S. C.
 J. L. Powe, Hartsville, S. C.
 C. M. Scott, Darlington, S. C.
 R. B. Smith, Lamar, S. C.
 J. F. Watson, Lamar, S. C.
 J. W. Williamson, Society Hill, S. C.
 J. W. Wilcox, Darlington, S. C.

Edgefield County:

W. T. Briggs, North Augusta, S. C.
 C. P. Corn, Johnston, S. C.
 J. G. Edwards, Edgefield, S. C.
 F. A. Marsh, Edgefield, S. C.
 A. R. Nicholson, Edgefield, S. C.
 J. G. Thompkins, Edgefield, S. C.

Florence County:

Thomas L. Ayres, Florence, S. C.
 J. M. Barnwell, Florence, S. C.

L. C. Floyd, Olanta, S. C.
 W. S. Lynch, Scranton, S. C.
 S. R. Lucas, Florence, S. C.
 F. H. McLeod, Florence, S. C.
 M. R. Mobley, Florence, S. C.
 L. J. Ravenel, Florence, S. C.
 F. K. Rhodes, Florence, S. C.
 C. D. Rollins, Lake City, S. C.
 D. H. Smith, Florence, S. C.
 D. H. Smith, Glenn Springs, S. C.
 C. H. Blake, Greenwood, S. C.
 J. E. Brunson, Ninety-Six, S. C.
 R. B. Epting, Greenwood, S. C.
 J. S. Fouché, Ninety Six, S. C.
 J. D. Harrison, Greenwood, S. C.
 J. C. Harper, Greenwood, S. C.
 W. T. Jones, Ware Shoals, S. C.
 Jno. Lyon, Greenwood, S. C.
 G. P. Neel, Greenwood, S. C.
 J. W. Payne, Epworth, S. C.
 J. H. Pratt, Ninety Six, S. C.
 John T. Simmons, Greenwood, S. C.
 W. P. Turner, Greenwood, S. C.
 C. H. Workman, Troy, S. C.

Greenville County:

J. L. Anderson, Greenville, S. C.
 T. W. Bailey, Greenville, S. C.
 C. O. Bates, Greenville, S. C.
 C. P. Benson, Travelers Rest, S. C.
 R. C. Bruce, Greenville, S. C.
 W. C. Black, Greenville, S. C.
 R. C. Bruce, Greenville, S. C.
 W. M. Burnett, Greenville, S. C.
 A. E. Brown, Greenville, S. C.
 W. T. Brockman, Greer, S. C.
 E. W. Carpenter, Greenville, S. C.
 L. G. Corbett, Greenville, S. C.
 J. W. Curry, Greenville, S. C.
 J. E. Daniels, Greenville, S. C.
 J. M. Davis, Greenville, S. C.
 J. P. Dupre, Fountain Inn, S. C.
 John W. DuPre, Simpsonville, S. C.
 J. B. Earle, Greenville, S. C.
 T. T. Earle, Greenville, S. C.
 C. B. Earle, Greenville, S. C.
 C. H. Fair, Greenville, S. C.
 Davis Furman, Greenville, S. C.
 Chas. C. Geer, Greenville, S. C.
 S. G. Glover, Greenville, S. C.
 Chas. W. Gentry, Greenville, S. C.
 C. T. J. Giles, Greenville, S. C.
 B. T. Goodlett, Travelers Rest, S. C.
 J. B. Hill, Greenville, S. C.
 E. B. Hendrix, Reedy River, S. C.
 R. E. Houston, Greenville, S. C.
 J. W. Jervey, Greenville, S. C.
 F. G. James, Greer, S. C.
 F. Jordan, Greenville, S. C.
 Dr. Knight, Greenville, S. C.
 J. A. Lindsay, Tigerville, S. C.
 L. O. Mauldin, Greenville, S. C.
 N. Y. McDaniels, Taylors, S. C.
 M. T. Moore, Greenville, S. C.
 J. L. Orr, Greenville, S. C.
 S. C. Owings, Greenville, S. C.
 W. S. Pack, Greenville, S. C.
 A. S. Pack, Greenville, S. C.
 John W. Parker, Greenville, S. C.
 W. H. Powe, Greenville, S. C.

L. L. Richardson, Simpsonville, S. C.
 W. A. Ross, Fountain Inn, S. C.
 L. F. Robinson, Greenville, S. C.
 R. D. Smith, Greenville, S. C.
 F. G. Sharpe, Greenville, S. C.
 M. S. Smith, Simpsonville, S. C.
 H. L. Shaw, Fountain Inn, S. C.
 W. B. Sparkman, Greenville, S. C.
 G. G. Swandale, Greenville, S. C.
 James Thomason, Fountain Inn, S. C.
 G. T. Ryler, Greenville, S. C.
 C. Q. West, Greenville, S. C.
 J. R. Ware, Greenville, S. C.
 J. M. Wallace, Greenville, S. C.
 T. R. W. Wilson, Greenville, S. C.
 A. White, Greenville, S. C.

Georgetown County:

Olin Sawyer, Georgetown, S. C.

Horry County:

H. H. Burroughs, Conway, S. C.
 J. S. Dusenbury, Conway, S. C.
 W. E. King, Aynor, S. C.
 A. D. Luvis, Mr. Tabor, N. C. R. No. 2
 H. L. Scarborough, Conway, S. C.
 E. A. Stalvey, Myrtle Beach, S. C.
 J. A. Stone, Little River, S. C.
 J. D. Thomas, Loris, S. C.
 J. A. Norton, Conway, S. C.
 Huger Richardson, Loris, S. C.

Hampton County:

J. K. G. Tuten, Furman, S. C.
 Johnston Peebles, Estill, S. C.
 P. J. Johnston, Estill, S. C.

Kershaw County:

S. F. Brasington, Camden, S. C.
 A. W. Burnett, Camden, S. C.
 W. J. Burdell, Lugoff, S. C.
 W. R. Clyburn, Camden, S. C.
 J. W. Corbett, Camden, S. C.
 W. J. Dunn, Camden, S. C.
 W. D. Grigsby, Blaney, S. C.
 J. T. Hay, Boykin, S. C.
 E. Z. Truesdell, Bethune, S. C.
 S. C. Zemp, Camden, S. C.

Lancaster County:

S. L. Allen, Lancaster, S. C.
 J. R. Belk, Kershaw, S. C.
 R. C. Brown, Lancaster, S. C.
 J. D. Funderburk, Lancaster, S. C.
 G. W. Poovey, Lancaster, S. C.

Laurens County:

J. D. Austin, Clinton, S. C.
 T. L. W. Bailey, Clinton, S. C.
 J. M. Bearden, Laurens, S. C.
 J. W. Beason, Gray Court, S. C.
 A. J. Christopher, Laurens, S. C.
 W. H. Dial, Laurens, S. C.
 J. L. Danner, Ware Shoals, S. C.
 J. W. Davis, Clinton, S. C.
 W. D. Ferguson, Laurens, S. C.
 J. L. Fennel, Waterloo, S. C.
 S. C. Hays, Clinton, S. C.

R. E. Hughes, Laurens, S. C.
 G. F. Klugh, Cross Hill, S. C.
 C. B. Mills, Cross Hill, S. C.
 J. H. Miller, Cross Hill, S. C.
 S. J. Peake, Clinton, S. C.
 C. E. Rogers, Gray Court, S. C.
 E. T. Taylor, Rennova, S. C.
 J. H. Teague, Laurens, S. C.
 C. P. Vincent, Laurens, S. C.
 R. R. Walker, Laurens, S. C.
 J. L. Young, Clinton, S. C.
 J. W. Young, Clinton, S. C.

Lee County.

N. Y. Alford, Wisacky, S. C.
 A. H. Brown, Oswego, S. C.
 L. H. Jennings, Bishopville, S. C.
 R. O. McCutcheon, Bishopville, S. C.
 J. W. Tarrant, Lynchburg, S. C.

Lexington County:

L. C. Brooker, Swansea, S. C.
 D. M. Crosson, Leesville, S. C.
 W. T. Gibson, Batesburg, S. C.
 J. R. Langford, Swansea, S. C.
 R. E. Mathias, Irmo, S. C.
 J. H. Mathias, Lexington, S. C.
 W. A. Oxner, New Brookland, S. C.
 G. F. Roberts, Lexington, S. C.
 P. A. Smith, Gilbert, S. C.
 W. P. Timmerman, Batesburg, S. C.
 R. H. Timmerman, Batesburg, S. C.
 J. J. Wingard, Lexington, S. C.
 J. P. Drafts, Leesville, S. C.
 D. R. Kneece, Pelion, S. C.

Marion County:

A. M. Brailsford, Mullins, S. C.
 C. F. Bullock, Nichols, S. C.
 E. M. Dibble, Marion, S. C.
 F. L. Martin, Mullins, S. C.
 Z. G. Smith, Marion, S. C.
 G. M. Truluck, Marion, S. C.

Marlboro County:

A. M. Buchanan, McCall, S. C.
 W. J. Crosland, Bennettsville, S. C.
 C. S. Evans, Clio, S. C.
 J. A. Hamer, Clio, S. C.
 J. L. Jordan, Bennettsville, S. C. (Honorary.)
 J. F. Kinney, Bennettsville, S. C.
 L. R. Kirkpatrick, Bennettsville, S. C.
 C. R. May, Bennettsville, S. C.
 A. F. Mahoney, Clio, S. C.
 J. C. Moore, McCall, S. C.
 C. D. Napier, Blenheim, S. C.
 J. L. Napier, Blenheim, S. C. (Honorary).
 J. H. Reese, Tatum, S. C.
 L. B. Salters, Blenheim, S. C.
 T. H. Smith, Bennettsville, S. C.
 D. D. Strauss, Bennettsville, S. C.

Newberry County:

W. A. Dunn, Newberry, S. C.
 J. J. Dominick, Prosperity, S. C.
 P. G. Ellison, Newberry, S. C.
 G. Y. Hunter, Prosperity, S. C.

W. G. Houseal, Newberry, S. C.
 W. O. Holloway, Chappells, S. C.
 J. M. Kibler, Newberry, S. C.
 O. B. Mayer, Newberry, S. C. (Honorary.)
 F. D. Mower, Newberry, S. C.
 J. H. Moore, Whitmire, S. C.
 E. H. Moore, Newberry, S. C.
 W. R. Pellham, Jr., Newberry, S. C.
 T. H. Pope, Kinards, S. C.
 Z. T. Pinney, Pomaria, S. C.
 W. D. Senn, Newberry, S. C.
 J. B. Setzler, Newberry, S. C.
 J. M. Sease, Little Mountain, S. C.
 J. S. Wheeler, Prosperity, S. C.

Orangeburg, County:

F. G. Blackburn, Cordova, S. C.
 L. D. Boon, Rowesville, S. C.
 V. W. Brabham, Orangeburg, S. C.
 G. C. Bolen, Neeses, S. C.
 A. L. Black, Bowman, S. C.
 A. W. Browning, Elloree, S. C.
 M. J. D. Dantzler, Elloree, S. C. (Honorary.)
 L. C. Doyle, Orangeburg, S. C.
 C. I. Green, Orangeburg, S. C.
 D. J. Hydrick, Orangeburg, S. C.
 L. A. Jeffords, Orangeburg, S. C.
 W. R. Lowman, Orangeburg, S. C.
 G. W. Nevils, Rowesville, S. C.
 H. T. Schiffley, Orangeburg, S. C.
 M. G. Salley, Orangeburg, S. C. (Honorary.)
 Lin C. Shecut, Orangeburg, S. C.
 Geo. H. Walter, Orangeburg, S. C.
 J. G. Wannamaker, Orangeburg, S. C.

Oconee County:

J. W. Bell, Walhalla, S. C.
 E. C. Doyle, Seneca, S. C.
 W. R. Doyle, Seneca, S. C.
 E. A. Hines, Seneca, S. C.
 J. H. Johns, Westminister, S. C.
 W. C. Mays, Fair Play, S. C.
 A. M. Redford, Clemson College, S. C.
 B. F. Sloan, Walhalla, S. C.
 J. S. Stribling, Seneca, S. C.
 W. A. Strickland, Westminister, S. C.
 J. J. Thode, Walhalla, S. C.
 C. M. Walker, Westminister, S. C.
 J. W. Wickliffe, West Union, S. C.

Pickens County:

J. E. Allgood, Liberty, S. C. R. F. D. 2.
 J. D. Bearden, Central, S. C.
 J. L. Bolt, Easley, S. C.
 L. G. Clayton, Central, S. C.
 W. B. Furman, Easley, S. C.
 L. L. Jameson, Easley, S. C.
 J. P. Jewell, Piedmont, S. C.
 R. Kirksey, Crow Creek, S. C.
 W. M. Long, Liberty, S. C.
 J. C. Pepper, Easley, S. C.
 W. M. Ponder, Dacusville, S. C.
 H. E. Russell, Easley, S. C.
 J. O. Rosamond, Easley, S. C.
 C. W. Smith, Liberty, S. C.
 L. T. Shirley, Central, S. C.
 W. A. Tripp, Easley, S. C.

J. L. Valley, Pickens, S. C.
 John Wallace, Easley, S. C.
 W. A. Woodruff, Cateechee, S. C.
 E. F. Wyatt, Easley, S. C.

Richland County:

W. C. Abel, Columbia, S. C.
 C. W. Barron, Columbia, S. C.
 J. W. Babcock, Columbia, S. C.
 W. R. Barron, Columbia, S. C.
 B. H. Baggot, Columbia, S. C.
 J. R. Boling, Columbia, S. C.
 E. A. Boozer, Columbia, S. C.
 W. A. Boyd, Columbia, S. C.
 D. S. Black, Columbia, S. C.
 W. E. P. Butler, Columbia, S. C.
 G. H. Bunch, Columbia, S. C.
 B. D. Caughan, 1626 Main St., Columbia, S. C.
 Hubert Claytor, Hopkins, S. C.
 G. A. Coward, Columbia, S. C.
 Earnest Cooper, Columbia, S. C.
 E. P. Derrick, Columbia, S. C.
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STATE BOARD OF MEDICAL EXAMINERS

QUESTIONS BY THE STATE BOARD OF MEDICAL EXAMINERS OF SOUTH CAROLINA.

Nurses, Materia Medica and Therapeutics, Dr. H. L. Shaw, Examiner, November, 1917.

1. What regulates Dosage? a. What is meant by Idiosyncrasy?

2. What are Emmenagogues?

3. What is the dose of Morphine?

Mention briefly the symptoms of poisoning by same.

4. What are Alteratives? Name two and give dose of each.

5. Typhoid fever patient has hemorrhage, what would you do in absence of physician?

6. What are Antacids? Name one.

7. What are Carminatives? Name one or more.

8. What are Eseharotics, or Cauterities? Name one.

9. What are Diaphoretics? Name one.

10. What are Saline Cathartics? Name one and give dose.

Nurses Obstetrics, Dr. E. W. Pressly, Examiner, November, 1917.

1. Of the following 15 terms define 10; (a) Abortifacient, (b) Areola, (c) Asphyxia, (d) Chloasma gravidarum (e) Cyanosis, (f) Diuretic, (g) Embryo, (h) Foetus, (i) Galactagogue, (j) Meconium, (k) Impregnation, (l) Irrigation, (m) Laeeration, (n) Puerperium, (o) Parturition, (p) Retained placenta, (q) Wet nurse.

2. Describe the care of the new born infant from the time of the division of the cord until the child is properly cared for.

3. What are the uses of the amniotic fluid during pregnancy and labor?

4. In the absence of a physician, what should be done for an asphyxiated child to bring about respiration?

5. What is meant by the term lochia, what are the characteristics of a normal lochia and how may these characteristics be altered by infected conditions?

6. What are the duties of a nurse during a labor with a physician in attendance?

7. What are false pains and how do they differ from true pains?

8. What are after pains, how are they caused, and what is their proper management?

9. Describe the phenomena of a normal labor in the order of their occurrences, from its inception to its completion.

10. Describe the technique of a catheterization in a puerpera.

Nurses, practice of Medicine, Dr. J. J. Watson, Examiner, November, 1917.

1. Mention two diseases in which convulsions occur.

2. What is the usual pulse rate in typhoid fever during the 1st week, 2nd week and 3rd week? This applies to adult patients with a fever of moderate severity and no complications.

3. What is fecal vomiting an indication of?

4. If a child had pharyngeal diphtheria, what symptoms would cause you to suspect the larynx was becoming involved?

5. During a case of lobar pneumonia what symptoms would cause you to administer stimulants without the physician's order?

Nurses Dietetics, Dr. John Lyon Examiner, November, 1917.

1. To what classes do the following foods belong: (a) beef, (b) potatoes, (c) butter, (d) sugar, (e) nuts.

2. What is meant by the Caloric Value of a food?

3. Which is the more easily digested roasted or fried meats? Why?

4. Why is stale bread more easily digested than bread freshly baked?

5. Compare the advantages and disadvantages of sterilized milk with those of pasteurized milk.

6. Why is mother's milk more suitable as an infant food than cow's milk?

7. What foods frequently produce ptomain poisoning? How may you prevent this?

8. Give two signs that indicate a fresh egg.

9. Why is salt used with ice in freezing ice-cream?

10. At what age would you give starchy foods to a healthy child? Mention one and tell how you would cook and serve it.

Nurses, Anatomy. Dr. J. T. Taylor, Examiner, November, 1917.

1. Name the bones of the foot.
2. How many Dorsal vertebrae are there?
3. Name the Carpal bones.
4. Name the special nerve of hearing.
5. Name the cavities of the heart.



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6. Name the vessels that take the blood directly from the heart.

7. Locate the foramen magnum and state its function.

8. Locate (a) gall bladder (b) spleen (c) vermiform appendix.

9. Name the two large arteries of the forearm.

10. Describe the stomach.

Nurses, Physiology. Dr. A. M. Brailsford, Examiner, November, 1917.

1. What is the function of the lacteals?

2. What juices digest the starches?

3. Give the physiology of respiration.

4. Describe briefly the action of the heart.

5. How is light transmitted to be registered in the brain?

Hygiene and Sanitation.

1. Discuss personal Hygiene.

2. How would you care for a typhoid patient?

3. What precautions would you take in nursing a case of diphtheria?

4. What is ophthalmia neonatorum and how prevented?

5. How would you care for a bottle fed baby suffering from enterocolitis?

Materia Medica, Junior Curriculum.

Dr. H. L. Shaw, Examiner, November, 1917.

1. Cocaine: Physiologic Action and Therapeutics, Dose.

2. Trional; Dose, Physiologic Action and Therapeutics.

3. Amyl Nitrite; Dose, How best administered, Therapeutics.

4. Give dose and Therapeutic effect of, No. 1 F1 Ext Ergot, No. 2 Infusion, Digitalis, No. 3 Sulphate Codeine, No. 4 Bromide Sodium, No. 5 Tr Nux Vomica.

5. Name the official preparations of Silver. Mention two other preparations of Silver in Common use.

CONTINUED IN NEXT ISSUE



THE BATTLE CREEK SANITARIUM.

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	1914	1915	1916	1917
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The Journal OF THE

South Carolina Medical Association



Published Every Month Under the Direction of the Board of Councilors.

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EYE, EAR, NOSE, AND THROAT.

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EDITORIAL

THE AIKEN MEETING SYMPOSIUM ON MILITARY MEDICINE.

The letters sent out by the Secretary of the State Association some time ago have brought quite a number of titles of papers to be read at the Aiken meeting. It has been proposed by the Committee on Scientific Work, of which Dr. R. S. Catheart of Charleston is the Chairman, to present a Symposium on Military Medicine and quite a number of papers have been received to this end. The Secretary desires some papers from medical members of County District and Medical Advisory Boards. Several states have made the later feature interesting and successful. President McLeod has secured two very able speakers to deliver the annual Addresses on Medicine and Surgery, namely, Major Seal Harris, Secretary-Editor the Southern Medical Associa-

tion, but now in the Surgeon General's Office at Washington, also Professor Martin H. Fischer, of The Cincinnati General Hospital, Cincinnati, Ohio.

CHILD WELFARE NUMBER AT- TRACTS NATION WIDE ATTENTION.

The demand for the December number of the Journal from various sections of the United States leads us to believe that no special number ever issued by the Journal except the Pellagra Number some years ago, has met with so much interest by various agencies and people interested in Public Health. We are pleased to note the following commendation from the Modern Hospital, the largest Journal in the world devoted to Hospital progress, published at St. Louis:

"The December issue of the Journal

of the South Carolina Medical Association is devoted to child welfare. It is said to be the only special number ever devoted to this subject by any state journal. Dr. E. A. Hines, the Editor, who is also a member of the State Board of Health, became interested in the subject of infant mortality from the southern standpoint and was astonished and dismayed to discover through extensive research the meagerness of the literature bearing on infant mortality in the southern states. He, therefore, with the aid of the department of vital statistics of South Carolina made a study of infant mortality with the cause of death and discovered the rate in South Carolina to be in his own words, "Appalling."

The Child Welfare Number of the Journal of the South Carolina Medical Association is a very creditable effort to draw attention to this problem, and induce the state to organize a division of child hygiene under the state board of health."

STATE BOARD OF HEALTH APPROVES THE ESTABLISHMENT OF A CHILD WELFARE BUREAU.

The State Board of Health met at Columbia on Tuesday, Feb. 19th. The proposition to establish a Bureau of Child Welfare was brought up and the following committee appointed to devise ways and means for establishing same:

Dr. E. A. Hines, Seneca, Chairman.

Dr. J. A. Hayne, State Health Officer, Columbia.

Dr. William Egleston, Hartsville.

It is probable this committee will report at the Aiken meeting of the Board in April. If the State Board of Health succeeds in its efforts, South Carolina will be the first state in the south to take such a step and will thus mark a



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distinct advance for the welfare of the children of South Carolina. It is fortunate that such action has been taken by the Board at this time for, as will be seen by a communication from the Childrens Bureau of the Federal Government published in this

issue of the Journal, a nation wide effort will be inaugurated on April 6th in the interest of the conservation of child life during the war. South Carolina will be in position to take part in this worthy enterprise to the fullest extent.

ORIGINAL ARTICLES

BY NEWTON T. CLARK, M. D.
Spartanburg, S. C.

THE ear is in no wise the least important organ of a living body. Even the Medusae are supplied with otocysts—minute balls of mineral matter (called sense-balls") suspended in a flexible club shaped body. In like manner we find in the human ear otoliths which possibly possess the power of helping transmit the sounds—in this way lending a helping hand—forwarding the message as it were. Again we see the body begin to lose its poise and wabble whenever the semi-circular canals are removed or the labyrinth is diseased. The impulse emanating from the cerebellum and co-ordinating in retaining the equilibrium of the body. It is to a large extent imaginary how the nerve filaments, these delicate ends of the Auditory nerve gather messages from across the continent after they have traveled over miles of lengthy telephone wire. The sounds go perfectly, evenly, and unperturbed. Whoever preserves or helps these delicate organs to maintain their natural standard of

development will perform a service to his country and community.

There is one perfunctory and phenomenal fact in regard to these structures of which we speak and that is the fact that many people today are deficient and becoming more deficient in their hearing and they do not realize it. Some, because they are unconscious of it and some, because of the neglect of the profession in failing to impress upon the laity the importance of preserving at the first shadow of deficiency this organ so paramount both from a personal and a sociological standpoint. The sedate and orderly thief is so courteously robbing them of their right that they raise not their hand in response to the alarm that besets them. We see these things occurring through families, not whole families but certain members of families who can not hear the toot of the automobile to the rear of them or the cry of the infant as he lies in his cradle covered in his swaddling clothes. They are willing and the doctor is willing that they be deprived of their full faculty of hearing and hearing efficiently. Let us hale with delight thorough examination of school children, thereby giving a boy the full power of all his faculties that he may the better prepare himself for the battles of life, and the

protection of the nation, and the development of all that is in him, and thereby giving a girl more personal attraction and physical preparation for the social and domestic affairs and the proficient propagation and perpetuation of the human race.

On the other hand the fragments of time leads us to ponder, if we have not been walking backwards in the onward rush of aural surgery. We gather the recorded events through which the progress of such has climbed and wonder why the felicity and ease of mind with which we delve into an operation of the mastoid. We take the sunny faced infant or the cherry faced lad or lass and plough out with tool and chisel the walls of bone that nature is preparing for these to fight the exigencies of fateful and eventful life. We walk away not with bowed heads but with uplifted faces that the youngster has gotten well to live deprived of what dame nature has intended his keeping till his lasting end. We pride ourselves the fact that we have saved a life forgetting in the meantime what we have lost for him. We can see in the distant future an oncoming vision of saving not only life but organs which we are now so readily and abundantly sacrificing. Abraham lifted the dagger to thrust into the bosom of Isaac, but a voice cried hold. Just so the surgeon who this day prides himself upon his delicate and accomplished mastoid, would some day could he live, hear a voice saying in the distance "Surgeon hold thy knife." We are pleading with ourselves and lamenting the fact that out goes these precious organs so dear to the rest of the personal anatomy.

We are begging the question and defying nature when we say that man can accomplish as much with such organs gone. Antiseptic surgery put

us to cutting galore and this pride of cutting has led us to an extent that is gross. The labor of calling a reaction will fall to our successors. The time will come when we will give up this surgical butchery, this artful effort and fall to the task of restoring organs along with keeping life and not the mere fact that life has been saved. We must apply ourselves in separating finer and more nicely disease from the tissues and elements that are sound and good. The day is coming when we will find that we can separate germs from flesh and make boosters of ourselves in that line. The efforts of our labors will have been rewarded by a lesser and simpler method. Trust to Biers hyperemic treatment when the gracious blood is made to fight for a limb or a muscle or a heart. This is mingling with the future. Today we can not see just why and where but tomorrow a new sun will rise to evoke new and motile inspiration to teach us the profundity of such accomplishments. The world rises up to cry and crown glory for Lister and for the discovery of Ether; but man will some day cry the name of greater heroes as they devotedly save not only life but organs and tissue. The great art of surgery is to save not to waste. We can now picture ourselves sending an electric needle to electrocute a germ in a cell but some day such will not be visions, but truth, reality, and fact. We will be able to eradicate diseased cells from a member instead of robbing the body of the same. Let us reclaim this robbed and unsubdued soil instead of abandoning it by cutting it away.

Today we are doing surgery with the eye unaided but some day we will turn the mighty powers of magnification upon the tissues and with the aided eye do a histological surgery

so to speak, picking away with delicate needle assisted by powerful ray the thundering calamities visiting the delicate anatomy of the ear. Germis will be picked from the mastoid cells, dragged from the eustachian tubes, scraped from their perch upon the ossicles and smothered in their trenches as they fight in the labyrinth.

We know that if a furuncle runs its course there forms around the debris a pathological cell by which nature heals. If we kill the germ while in around the histological cells then we will abort the furuncle and avoid the further pathological condition.

A sneaky catarrhal inflammation begins to appear at the pharyngeal end of the eustachian tubes. The cavity of the tubes begins to disappear and deafness begins to ensue.

We clear away the inflammation of the tube do inflation and dilation, restore the normal conditions and then there begins to reappear the tube in its patulency and the drum in its potency while deafness disappears.

There is relation between germ and cell, between cell and cell, and organ and organ. Deafness begins to appear in one or both ears. A careful examination of drum and tube is made and nothing is decided. A further examination is made implying the nose, and here a hypertrophied turbinate or a large spur is found and there the trouble lies. Or possibly no upsetting condition is found in the nose, but a pair of enlarged tonsils are discovered (this being the exciting flame). The mechanical pressure of these en-

larged organs play a part in cutting away the intra-tympanic air allowed for equalization of the same and thorough drainage of all.

Sometime ago the speaker noted three cases of gall stones, in which there appeared a fullness, a deafness and slight roaring in the right ear. This appearing not constantly but periodically. Upon removal of the stones in two of the cases this ear condition abated, but the stones and the ear affliction remain in the other case.

Often there is noted an otitis media and the predisposing cause is found in the nose. Here is carried in the diseased nasal cavities a foiled weapon, a submarine, dealing death to a neighbor ear. Here we steer our ship around a mastoid operation because we remove the exciting cause of the diseased ear by treating the nose.

Only a short time ago a man appeared in my office who reported that he had two sounds in his ear from any noise. The examination revealed a mixture of blood and wax in his ear. Upon the floor of the canal and against the drum he had an air conduction of the vibrations and a body conduction transmitted by the mixture.

On occasions it is noted that impacted cerumen in the aural canal will cause a cough. Even a probe playing in the ear will cause a like phenomenon. These aural phenomena and the relationships demand a constant outlook for their appearance, and a constant study of the different characters of toxemias, nervous impulses, and more than all, the phenomena of mechanical pressure.

POST OPERATIVE TREATMENT OF GASTRO INTESTINAL TRACT FOLLOWING ABDOMINAL SECTION.

By John Wallace, M. D., Easley, S. C.

IN presenting this paper it is not my intention to introduce anything new, but as an article on this subject is so seldom seen in surgical literature, and believing it to be one of the most important subjects in this field, I thought that it would be appropriate at this time. I shall eliminate treatment subsequent to gastro-enterostomy, re-sections, etc., as this class of cases require special treatment.

The treatment of the gastro-intestinal tract after abdominal section, if the patient has been well prepared before operation, is as a rule very simple, and requires very few medicinal agents, especially in well selected cases. As a post-operative routine, I think water should be given freely from the outset, even though the patient vomits. It is much better, and easier to vomit water than to strain and vomit viscid mucus, or nothing at all and the water also serves the very good purpose of washing out the stomach, which contains some ether if this anaesthetic has been used, at the same time making the patient more comfortable, and what water is retained is very beneficial in flushing the kidneys. I prefer this method to lavage while the patient is still on the operating table. The mouth should be kept as clean as possible with some of the various alkaline mouth washes. Calomel may be given on the evening of the second day, or about thirty-six hours following the operation. It

seems to give the best results, and is best borne by the patient. To an adult may be given in one dose of two or three grains, or in one half grain doses every one half to one hour until the desired amount is given, followed in eight to ten hours by some cathartic, such as citrate of magnesia, - ounces four to eight, or sulphate of magnesia, ounce one half. This may be followed in two to four hours by a warm normal saline enema, one quart or more. If this does not have the desired effect in four to six hours, a rectal injection of olive oil ounces two, with glycerine, ounces one, will usually produce a stool. Thereafter if the patient is doing well, it is only necessary to keep the bowels open by the use of a normal saline enema every day, or every second day. Any other simple laxative will suffice that will not cause too much griping or pain.

I am not in favor of giving nourishment during the first 24 to 36 hours after operation, for the reason that the stomach and intestines are not in condition to perform normal function during this period.

Persistent nausea and vomiting of thin foul fluid, associated with extreme restlessness and excitement, or dullness instead, occurring after emergence from the anaesthesia, and reaction from shock, suggests acid intoxication. Crile in an article, "Influence of Acidosis in Surgery," (Annals of Surgery, Sept. 1915) "points out that operative trauma, and inhalation anaesthesia always produce acid by-products, which effect primarily the brain, adrenals and liver, and thereby encourage an acidosis with its resulting shock."

The indications here are to examine the urine for the presence of b-oxybutyric acid, and diacetic acid at once and if found, to saturate the patient

with alkalies, sodium bicarbonate usually being selected. This may be given by mouth in milder cases, 10 to 20 drachms per day. It should be given by rectum drachms 4 with 8 ounces of water every six hours, or may be given intravenously in 3 to 5 per cent solution, about one or two pints. Some surgeons use sodium carbonate or citrate instead.

I have seen many cases improve under this treatment.

In patients who suffer from tympanites, with no other complications, a rectal injection of milk of asafoetida, ounces 3, to warm water one pint, or a turpentine enema, drachms one to one or two quarts of warm water, will often relieve this condition. It is probably true that in dealing with the above class of cases, some surgeons in their anxiety to relieve the patient at once, and to get an evaevation from the bowels, tend to over-treat the patient, by giving too many drugs and enemata, whereas if they had been given simple treatment and let alone for 24 hours or more, we would have gotten the desired results, and prevented much trouble. However; we should not fail to recognize early, and treat vigorously a condition called intestinal-paresis, or temporary muscular paralysis of the intestinal tract, associated with more or less dilation of the stomach, which usually occurs about the third or fourth day following abdominal operation. Here we have meteorism and depression, sometimes to an alarming degree, with continuous, or intermittent vomiting. The vomitus may contain intestinal contents. The patient is unable to retain anything given by mouth, and we have much trouble in producing a movement from the bowels. This peculiar condition seems to occur most frequently after lengthy operation,

necessary or unnecessary exposure or manipulation of the intestines, thereby producine some disturbance, possibly of the great nerve plexus of Aurbach and of Meissmer of the small intestines. Some surgeons claim that the condition is brought about either by lowered nerve vitality, or by some change in the central nervous system, and according to other observers, it is a direct result of toxic effects due to migration of the colon bacillus. It matters not what may be the cause, our attention is immediately turned to producine a thorough movement from the bowels, by stimulating peristalsis or otherwise, and for a time at least we can eliminate the nourishment proposition. Here we are justified in using what normally might seem to be irrational methods. Calomel may be given by mouth in doses of from one eighth to one fourth grain every hour until five or ten grains are given. But I prefer giving powdered calomel, grains 10 to an adult, placed on back of tongue dry. This may be repeated in three or four hours, once or twice if deemed necessary, and followed in from three to four hours by an enema of asafoetida ounces 4 to one pint of warm water, given as high as possible through a colon tube. Rectal injection of Epsom Salt, ounces one, with three or four ounces of warm water, one ounce of glycerine being added, is frequently beneficial. Castor oil and Olive oil with or without glycerine is also beneficial at times. In case these agents fail, it is good practice to wash out the stomach with plain warm water until the solution returns clear, then introduce through a tube 2 to 4 ounces of Epsom Salt in very concentrated solution, and allow this to remain. This may be repeated when indicated. I have seen good results obtained by this method. Epsom

Salt may also be given sub-cutaneously in 2% solution, 2 to 4 ounces at a time. Hypodermic injections of pituitrin should always be tried in these cases, in doses of from one third to one C. C., and repeated in one hour or more. This drug not only promotes peristalsis, but it tones up the unstriped muscles of the entire body, thereby giving the patient more vigor. Eserine Sulphate or Salicylate given hypodermatically in doses of grains one one-hundredth to one sixtieth every four hours for four or five doses will at times promote peristalsis and give the desired result after all other agents seem to have failed, but on account of the danger of profound depression which sometimes follows its use, one should watch the patient very closely. The dominant action of the drug is said to be upon the motor neurons of the spinal cord, which are paralyzed by large doses, and that it increases peristalsis by directly stimulating the unstriped muscle fibers of the intestines.

I wish to elicit free discussion upon this subject, in order that we may know better how to sustain the lives of our patients after performing a successful operation.

THE DIAGNOSIS OF URINARY LITHIASIS.

By N. Bruce Edgerton, M. D., Columbia, S. C.

IT is extremely unfortunate that there are men still in the practice of medicine who will treat lumbar pain without ever having seen the patient's back. They make a diagnosis of rheumatism or neuralgia, forgetting that rheumatism is usually exhibited in the neighborhood of joints, and that neuralgia follows the course of nerves.

When the leading symptom points to trouble along the urinary tract, a diagnosis of cystitis is made and cystitis tablets are given. A great many of our number do not realize that they are merely temporizing and that in the future the condition will without doubt assume a much more serious aspect. It certainly behooves the right thinking man to properly inquire into every Urological condition, see that a correct diagnosis is made and the proper treatment instituted looking toward an ultimate cure.

Many perplexing problems are presented while working out an exact diagnosis of Urinary stone. Findings in this line of endeavor are becoming more and more exact. The procedures in the diagnosis of Urinary stone have been so methodically planned that not only can we say that a stone is present, but in addition we can say pretty definitely in which particular portion of the kidney or ureter the stone lies, the exact condition of function of these organs, and whether or not the stone should be removed and the kidney left—or both kidney and stone removed together. All this can be worked out before operation. From the combined findings of the X-ray and urological worker plans as to the method of approach can be very accurately determined, grave mistakes can be prevented, a shortening of the operative time can be accomplished thru exact localization of the position of the stone. Thru these aids the patient's strength can be conserved and functional kidney substance spared.

Given a case in which the possibility of Urinary stone has entered and the worker will need: 1. A well taken History together with a complete physical examination. 2. After proper preparation of the patient a well taken radiograph. (a poor worker

in X-ray work is worse than none). 3. A complete study of the Urinary findings and their proper interpretation. 4. Complete cystoscopic findings including the passage of ureteral catheters, impermeable to the X-ray if need with X-ray picture made while the catheters are up if needed. A study of the functional value of the kidneys (Functional value to be determined from the various tests used for this purpose, among which the phenosulphonethalein of Rountree and Geraghty is probably the most valuable as a guide). However a differential urea will be of value in selected cases. 5. In certain cases the use of pyelography.

The properly taken history will include every vague or indefinite symptom since childhood for some cases of urinary stone show no marked appreciable symptoms over long periods of years. The important subjective symptoms are 1. Pain and 2. Hematuria. The pain may be a 1. Fixed pain 2. A radiating pain. 3. A referred pain. 4. At times in kidney stone a constant dull ache in the lumbar region. In ureteral stone a dull ache in the side. However pain is present in 70% of cases. (1) The pain may begin in the costo-muscular angle posteriorly, or in the anterior kidney pain area. (At a spot on the front of the abdomen one and one half inches below and at the tip of the 9th. rib. (1) and from either of these points radiate over the abdomen following the surface markings of the course of the ureter, or probably course a little lower down following more the angle of Poupart's ligament. This pain may stop at the External abdominal ring it may pass on into the testicle of the same side, or it may be referred to the leg or foot of the same side.

The fixed pain of kidney or ureteral stone may be confused with various other pathological conditions. When from the kidney and associated with an infected urine the pain may be confused with a high lying appendicitis, with diseases of the gall bladder, with pancreatic disease, with perforating gastric ulcer, or with mesenteric embolism and in certain cases with sub-diaphragmatic abscess. Most important tho is the differentiation from gall bladder disease. There is no condition which calls for more thought than that of a large infected kidney full of calculi which thru pressure on surrounding organs has caused symptoms simulating disease of all the other viscera in its vicinity.

The ureter is about twelve inches in length and has three points of constriction, the first at the uretero-pelvic junction, the second at the point where the tube crosses the brim of the bony pelvis, the third at the point of entrance into the bladder. The pain of ureteral stone lodged at the first constriction simulates almost exactly the pain of true renal stone. The pain of ureteral stone lodged at the second constriction of the ureter simulates acute appendicitis in a great many cases when located on the right side. At this point the ureter and the appendix lie in close association and it is very easy at times to confuse one condition with the other. The pain of a stone plugging the ureter at the vesical constriction resembles in a great many respects the pain of bladder stone. In a great many cases in the female the pain of ureteral stone simulates and is simulated by tubo-ovarian disease due to the anatomical relation of these organs. The nearer the kidney a ureteral stone is arrested the more the pain resembles kidney

stone, the nearer the bladder the stone is arrested the more the pain looks like vesicle calculus.

Jeanbrau states that 17% of ureteral stones are found in the Vesicle end of the ureter and he further states that the presence in the history of an attack of colic without having passed a stone is valuable in this diagnosis. A calculus in this portion of the ureter causes a large variety of confusing symptoms. The symptoms are particularly confusing when the stone is located in the intravesicle portion of the ureter. Dysuria, frequency, cloudy urine, pain in the meatus of the penis, and occasionally a few drops of blood are important. And Dr. Hugh Young has observed seminal phenomena (nocturnal emissions) Testicular phenomena (pain in the testicle of the same side, Rectal symptoms (chronic in the rectum increased at the moment of defecation.)

Examination of the Urine.

The two most important considerations in examining the urine are whether or not there is an infection—and how much pus is present. Infection takes place in about 65 percent of cases. In a series of one hundred and fifty cases Dr. Hugh Cabot has reported twenty-one of the urinary examinations as normal. A negative urine after repeated examination is against the presence of stone but certainly a stone may be present. During the passage of a stone and for a long time afterwards a few red blood cells will be found in the urine. The urine is negative for blood when the stone is not movable and when the surface is smooth and regular in shape.

Radiography.

All patients whose urine contains pus at repeated examination should be radiographed for urinary stone. In

practically all cases of stone in this system satisfactory pictures are obtainable with proper technic. Radiograms of ureteral stone are not as satisfactory as those of kidney stone. Geraghty and Hinman have worked this out most carefully and their findings show that ureteral stone was present when the plate failed to show any shadow in 22.4%. The X-ray work should be done with the patient, tube, and plate in a fixed position—and these relations should be carefully noted in order to reproduce the exact relations at a later date if further Radiographic work is needed.

The Urologist is dependent on the X-ray worker for a great deal of the findings necessary for a correct diagnosis of Urinary Stone. In a great many cases, and in fact in all cases cystoscopic procedures should be carried out before any operative work is determined upon. A great many shadows cast by the radiograph in the kidney region are at times very confusing. After the passage of Ureteral catheters impermeable to the X-rays and if necessary the injection of Thorium into the kidney pelvis—the intra-renal or extra-renal nature of certain shadows can be determined with absolute accuracy. If necessary while the catheters and thorium are still in the kidney pelvis stereoscopic plates may be made. From these plates valuable data may at times be gained.

In the 22.4% of ureteral stones missed by the plain X-ray plates—they were detected in the ureterogram. (The injection of Thorium along the ureter and a plate made while the Thorium is still filling the ureter.)

The other information obtained from cystoscopic examination. The separate kidney function is obtained

from which a decision with regard to kidney value is deduced. The condition of the ureteral orifice is noted. If the stone lies low in the ureter the orifice will be congested and eechymotic spots will be noted around the orifice for the bladder mucosa in the neighborhood of the ureteral orifice has the same blood supply as the lower end of the ureter. If a stone has begun its course down the ureter the ureteric contractions will have become sluggish due to the irritation of the stone. On attempting to pass the ureteral catheter an obstruction will in practically all cases be encountered at the site of the stone. Thru the passage of the catheter the ureter is stimulated to further contractions and the stone may be pushed into the bladder at the same sitting at which the work on the diagnosis is being carried out. Thru this one agency the ureter can be proved to have a patent lumen and ureteral stone excluded when the question is a differential problem. (As in appendicitis from ureteral stone.)

No case should be operated for kidney or ureteral stone until all the findings are combined and the diagnosis made from the grouped findings. From these findings the position of the stone has been determined—the operation can be planned and a decision as to pyelotomy, nephrotomy, or nephrectomy made. In this connection I wish also to impress on you the fact that more is necessary than to know that a stone is in the lower end of the ureter. One must know whether or not the stone is in the intravesicle or juxta-vesicle portion of the ureter in order to properly plan operative attack. In the former the operation would be directed supra-pubically in the latter latero-vesically. The only method of determining this is thru the

use of the cystoscope and the ureteral catheter.

The accurate diagnosis of stone in the bladder depends on good radiographic work confirmed by cystoscopic examination. A stone in the bladder may be associated with malignancy, a diverticulum, an enlarged prostate, and a stone in the ureter. A stone shadow cast in the midline on the plate usually points to stone in the bladder, unless the bladder contains sacculations and then of course the stone can lie to one side and lie in one of these pockets to one side of the midline.

Stone in the prostate gland is rather rare. It occurs however in the late period of life and may be confused with a malignant prostate. The X-ray throws a shadow in the prostatic area in stone and does not throw any shadow in this area in malignancy. In malignancy the prostate is fixed and there is not the usual crepitation found in prostatic stone. The cystoscope in a malignant prostatic usually excites very little if any pain. In stone in the prostate a clicking may be felt and considerable pain may be elicited on its passage. There should be no trouble in differentiating these conditions. Stone in the urethra causes a shadow in the line of the ureter and any urethral instrument in skilled hands will get the click of contact.

There is no field of diagnosis in which complete and honest co-operation is as necessary as in the diagnosis of conditions along the genito-urinary tract. This is particularly true of stone. There is need for the closest co-working of the X-ray man with the Urologist. It is of the utmost importance that the general practitioner, the internist, and the surgeon have faith in these workers. There is no

field in which happier results may be accomplished. Further that troubles with the urinary apparatus are most annoying and that a great many of these conditions are now curable. In order for the proper remedy to be invoked tho it is first necessary that a correct diagnosis be worked out.

In the Urological conditions which prove to be surgical it is also necessary that the surgeons realize the value of correct work in diagnosticating these conditions. It is only in properly working together in this work that good results can be attained in a large percentage of cures.

Literature.

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2. H. Cabot, Inter J of Surg. 1916 XXIX 20.

4. Gray's Anatomy.

3. Geraghty J. T. and Hinman F. Special means of diag and newer methods of intra Vesicle Treatment Surg Gyn. and Obs. 1915 XX—515.

Bugbee Harry G. Personal Instruction, 1916. Illustrations from Bugbee on Diag Urinary Litterases.

DISCUSSION.

Dr. Barron, Columbia: The question of saline output, determined by functional test is not materially reduced, or reduced at all. I have had cases that demonstrated that my 'thalein output would be just the same from both kidneys, and yet be dealing with either side.

This paper is extremely valuable in every way to every one, no matter what field of practice they may be engaged in.

The work I do is an assistant in surgery. We had, just a few months ago,

a negro girl that made a profound impression on me. Her appendix was removed, and the child sent home, apparently relieved of pain. In ten days the temperature shot up, there was exruciating pain, and the diagnosis of lumbar abscess was handed the surgeon. The surgeon cut in and got a great, big stone out of the kidney. That case right there emphasizes just the points Dr. Edgerton has brought out there.

Another case: He has had two operations for the removal of stones, and he has three stones in the pelvis of the kidney now, the size of your thumbnail. I succeeded in getting a catheter by the stones, all right. The catheter will go by the 'thalein from the good kidney 30 per cent, and from the bad kidney $26\frac{1}{2}$ per cent. The man has pus constantly in the urine. He does not know he is having any pain at all, and is fatter than he has been before in his life, but we have warned that man he is going to get destruction of that kidney.

Dr. Guerry Columbia: When a man reads a first-class paper like this, he covers the field, and there is nothing left for us to say except that we agree with him.

I have had two interesting experiences that I want to lay before you, as showing the difficulties of diagnosis, and I will be through.

Several years before we were prepared to do the cystoscopic work and ureteral catheterization that we are doing now, we had a man with pain immediately under the McBurney's point, with pus and blood in the urine, and occasional temperature. Continuous temperature and occasional blood. We did not do a cystoscopy, because it was not done at that time. We would send him home and he would come back with the same old story—pain in the

right side and pus, and blood, with rigidity in the right side. So we investigated, and right at this position that appendix lay over that right ureter. The tip of the appendix was the only part diseased—about the size of your thumb. It was densely adherent, and when the appendix was removed there was a pin-point opening between the appendix and the ureter, showing how difficult it is to make a diagnosis. Stewart McGuire, I think, has two. They are scattered around occasionally, I think, through the literature.

Another man had an attack of supposed kidney colic in his right kidney repeatedly, but we could not find any occasion for operation, other than colic at widely separated intervals up over the pelvis of the kidney. You could put a silver dollar on the structure of this ureter, and you can cover the fundus of the gallbladder, the duodenum and the———, and that makes these diagnoses so hard. This man would come on with these symptoms of pain, and finally we sent him to Baltimore. They were extremely careful with him, cystoscoped him, and catheterized his ureters, and he came home with the opinion that he had no stone. Finally we sent him to George Walker, and he said he had no stone, but the secretion from the right kidney

was about 30 per cent more than the left kidney. Walker said he has a neurotic kidney. He had another attack and we explored the right kidney; clamped the vessels low down and opened his kidney from pole to pole, and we could not find any stone. I opened it still farther until we went into the pelvis of the kidney, and we could not find anything, but at the bottom of the pelvis of the kidney he had a stone about the size and as thick as your finger-nail. It seemed to be buried in the mucus membrane. We removed the stone and he is well and going about his business today.

Those two cases, to me, are extremely interesting and to the point of the paper, and emphasize the great difficulty of making the diagnosis.

Dr. Edgerton closes: I would like to give a case: No stone, but in the extra vesicle portion of the left ureter a mass of crystals and a mucous which blew out when the catheter went in, and the urine from the left side showed abundance of crystals, and from the right side no crystals, and 2 per cent urea.

I did not do anything at the time for the man. He went home and came back later, and I worked him out further and found that that kidney had complete retention.

STATE BOARD OF MEDICAL EXAMINERS

Therapeutics, Senior Curriculum.

1. Acute Nephritis; Hygienic, Dietetic and Medicinal treatment.
2. Amoebic Dysentery; Medicinal treatment.
3. Progressive Pernicious Anemia; Hygienic, Dietetic and Medicinal treatment.
4. Give treatment of a case of Spasmodic Croup.
5. Gastric Ulcer; Complete treatment of the case, other than surgical.
6. Epilepsy; Medicinal treatment.
7. Cholelithiasis; Diet and Hygiene. Treatment of an attack of Hepatic Colic.
8. Give Prophylactic treatment in case of exposure to Venereal disease.
9. Orchitis; Local and internal treatment.
10. Tetanus; Prophylactic and curative treatment.

Obstetrics. Dr. E. W. Pressly, Examiner, November, 1917.

1. Define the following terms; (a) Superfetation, (b) Asphyxia Neonatorum Pallida, (c) Cephal hematoma, (d) Spina bifida, (e) Omphalitis, (f) Chorea gravidarum, (g) Chondrocranium, (h) Symphiseotomy, (i) Hyperemesis gravidarum, (j) Hypergalactation.

2. Name the indications that demand the induction of an abortion, (not a premature labor), and describe a recognized method of inducing an abortion.

3. What is meant by the term "incomplete abortion," and what is the management of this condition?

4. How would you diagnose an ovarian tumor coexistent with preg-

nancy, and what are its possible dangers? Give treatment for this condition.

5. Define version, give the recognized varieties of version, the indications for its employment, its dangers, and the technique to be used in doing the most frequently used variety.

6. Describe the method of delivering the after coming head in a breech presentation.

7. What (from the view point of the obstetrician) is the perineum, how is it endangered in labor, how may the danger be obviated in many cases and what are liable to be the late consequences of its laceration?

8. What is post partem hemorrhage? State its causes and varieties, and give the treatment prophylactic and otherwise for this condition.

9. State the conditions mandatory and elective that justify the use of the obstetric forceps, and describe in detail the technique of a low forceps operation with head in R. O. A.

10. What is phlegmasia alba dolens? Give the two forms in which this condition manifests itself, its symptoms and its management.

Practice of Medicine. Dr. J. J. Watson, Examiner, November, 1917.

1. Describe a case of Myasthenia gravis.

2. What are the causes of Cardiac Arrhythmia?

3. Describe a case of Herpes Zoster.

4. State the diseases with which Herpes Zoster might be confounded and give their diagnostic differences.

5. Describe a case of Bronchiectasis.

6. Give the symptoms and possible terminations of Duodenal ulcer.
7. What are the symptoms of Perinephritic abscess.
8. In a case of Ascites how would you determine whether the fluid was a transudate or an exudate?
9. Define measles.
10. Describe a case of itch.

Bacteriology and Pathology, Junior Curr. Dr. John Lyon, Examiner, November, 1917.

1. Give a good routine stain for pus or exudate and bacteria and give the technique of its use.

2. What is the most characteristic staining property of the tubercle bacillus? Why?

3. Give characteristics of the cerebrospinal fluid in the following conditions: (a) epidemic cerebrospinal meningitis, (b) tuberculous meningitis.

4. Describe the changes in the blood vessels produced by syphilis.

5. Describe the lungs in bronchopneumonia.

Gynecology and Pediatrics, Senior Curriculum.

1. Name the uterine ligaments. Show by diagram the normal position of the uterus and state how this position is maintained.

2. Give the usual clinical history in each of the following conditions: (a) carcinoma of body of uterus, (b) carcinoma of cervix, (c) uterine myomata.

3. Give the causes and clinical history of acute inflammatory conditions of the fallopian tubes.

4. Give the palliative treatment of advanced carcinoma of the cervix.

Give the indications for and technique of the transplantation of ovarian tissue.

6. Prescribe a cows milk diet for a healthy baby four months old. (Give

in detail all instructions for mother or untrained nurse.)

7. Give the symptoms of Rotheln (German measles) and give a differential diagnosis of the diseases with which it may be confounded.

8. Give the clinical signs of acidosis in children. Outline a plan of treatment for same.

9. Give the symptoms of Cretinism in a child six years of age and outline a plan of treatment for the same.

10. Give the symptoms, diagnosis and treatment of pyelitis in infancy and childhood.

Anatomy, Junior Curriculum. Dr. J. T. Taylor, Examiner, November, 1917.

1. Name the ligaments of the elbow joint.

2. Name the abductors of the thigh.

Give the position of and describe the spleen.

Name the bones forming the orbit.

5. Describe the stomach.

Anatomy, Senior Curriculum.

1. Name the five main fissures of the brain and tell what they separate.

2. What is the function of the Rolandic area?

3. Name the structures severed in doing a transverse incision through the ankle.

4. Name the structures severed in doing a transverse incision through the wrist joint.

5. Describe the line of incision to find the median nerve in the upper third of the forearm.

6. What arteries are to be looked for in extra uterine pregnancy? At what point is each to be controlled?

7. Describe the line of incision in doing an operation on the Mastoid Cells. What nerve is in danger if penetration is too deep?

8. Give the nerve supply of the nose.

9. Give the blood supply of the lungs.

10. Give the normal position of the heart.

Surgery, Dr. Harry H. Wyman, Examiner, November, 1917.

1. Give diagnosis, differential diagnosis and treatment of tubercular adenitis.

2. Discuss fractures of the pelvis—diagnosis and treatment.

3. Give causes, diagnosis and treatment of infectious arthritis.

4. What symptoms would make you suspect syphilis of the brain and its meninges? Give diagnosis and treatment.

5. Give symptoms of acute intestinal obstruction and differential diagnosis.

6. Describe clearly the successive steps in applying a Buek's extension apparatus for a fracture of the femur.

7. Give the conservative and surgical treatment of acute epididymitis.

8. On injuries or diseases of the brain what symptoms would indicate a decompression operation (trephining or others?)

9. How would you treat a compound fracture of tibia that was contaminated with soil or dirty material?

10. Reduce an upward and forward dislocation of the hip joint by manipulation (Kocher's Method).

Chemistry and Physiology, Junior Curriculum, Dr. A. M. Brailsford, Examiner, November, 1917.

1. What is meant by chemical affinity?

2. Define valence. Mention two elements that vary in valence.

3. What are salts and how are they formed?

4. Mention five elements found in nature only in combination.

5. What five elementary substances

commonly used in medicine in a pure or unecombined state?

6. What is meant by animal heat, and how is it maintained?

7. (a) How is voice produced?
(b) What is the difference between stammering and stuttering?

8. Mention the nerve centers and their common properties.

9. What are the most important skin reflexes—and where do their centers lie?

10. What is the point of difference between cranial and spinal nerves?

Hygiene, Senior Curriculum. Sanitation, State Medicine.

1. Mention the most important preventable diseases that affect armies.

2. What three diseases that were once considered "seourges of armies" are now practically unknown among troops? How prevented?

3. Discuss the disposal of wastes.

4. How much floor and air space should be given each soldier in barracks?

5. Discuss ventilation.

6. How would you control scabies among troops in the field?

7. Disinfect a room that had been occupied by a case of diphtheria.

8. Discuss briefly water supply.

9. What effect has climate upon disease?

10. (a) Define humanity. (b) What is meant by relative humidity?

Urinalysis, Microscopy, Toxicology and Medical Jurisprudence. Dr. A. Earle Boozer, Examiner, November, 1917.

1. What are the constituents and physical properties of normal urine?

2. Urine on standing undergoes what change in reaction, and why? What effect does the change have upon the constituents of the urine?

3. Differentiate between Albuminuria, Phosphaturia and Pyuria.

4. What objective would you use in urinary microscopy? What in bacteriological work?
5. What are the most frequent normal deposits seen in urine under the microscope?
6. What disease does poisoning by Arsenic simulate? What is antidote and how prepared?
7. How would you treat a case of

poisoning by Bichloride of Mercury?

8. What are the differences in appearance between an anti mortem and a post mortem burn?

9. Name the pathological conditions in which sudden death is liable to occur.

10. What is the most important medico-legal question arising in the disposition of property by will?

A B S T R A C T S

THE CHILDREN'S YEAR.

April 6, 1918—April 6, 1919

To Save the Lives of 1000,000 Children
in the United States.

Memorandum

Every year 300,000 children under five die in the United States. Authorities agree that half of these deaths are easily preventable, so that if civilians realize that the guarding of child life behind the lines is a patriotic duty their efforts should certainly be able to save the lives of 100,000 children in this country during the Children's Year, beginning April 6, one year from the day the United States declared war.

Each State will be assigned a definite quota of the hundred thousand lives to save. State councils of defense and the State women's committees are being called upon to be responsible for the State quotas.

Methods of work will be those which have already proved efficient in saving children's lives in the United States and other warring countries.

To inaugurate the Children's Year a nation-wide weighing and measuring of babies and children of pre-school age will be made. No such general

test of the well-being of children has even been attempted. It will show each community what its children need if the rising generation is to be free from the physical defects which the draft has revealed.

The plans contemplate economy for every purpose except for the essential means of protecting child life.

In co-operation with the Women's Committee of the Council of National Defense, the State Councils of Defense, and public and private organizations throughout the country, the Children's Bureau is preparing plans for a child welfare campaign for the second year of the war. The first aim of the campaign will be to secure the public protection of maternity and infancy.

Public health authorities agree that one-half the deaths of infants are easily preventable, and that if children were well born and well cared for there would be practically no deaths of babies. Three hundred thousand American children under 5 die each year. Authorities also tell us that most of the fifteen thousand mothers who died last year died needlessly.

It is the plan of the Children's Bureau to save a certain definite proportion of these lives. It is believed

that one hundred thousand lives can be saved this year notwithstanding the withdrawal of a large proportion of doctors and nurses for war service.

According to calculations based upon the most recent census figures available the quota to be saved in the various States in the Children's Year beginning April 6, 1918, is as follows:

(THIS MATERIAL WILL BE SUPPLIED LATER, IT WILL GIVE THE FIGURES OF THE QUOTAS FOR EACH STATE.)

The State councils of defense and the State women's committees are called upon to be responsible for the State quotas. The actual methods by which those lives are to be saved are those whose effectiveness in saving children's lives is already demonstrated. They are described at length in various pamphlets which have been prepared by the Children's Bureau.

Briefly, the essentials are as follows:

First: The registration of births so that the need of medical and nursing care may be promptly known and met.

Second: For every mother prenatal care, necessary care of doctor and nurse at confinement, and after care.

Third: Children's conferences where well babies can be taken periodically to be weighed and examined, and clinics where sick children may be given medical advice.

Fourth: Public health nurses for home visiting.

Fifth: The organization of State and city divisions or bureaus of child hygiene.

Sixth: The guarding of the milk supply, that every child may have his quota of clean, pure milk.

Seventh: An income making possible decent living standards.

In 1916 and in 1917 a nation-wide

baby week was held under the auspices of the General Federation of Women's Clubs and the Children's Bureau which has resulted in awakening a new sense of civic responsibility for infant life in thousands of localities, and has secured many new activities such as nursing services, clinics, children's conferences, better milk and food supplies, better enforcement of birth registration laws.

In many communities the Baby Week has proved an exceedingly effective means of awakening permanent interest at little or no expense.

Valuable as Baby Week is, however, the present emergency demands a longer and more comprehensive program. After the Nation's soldiers are provided for, the second year of the war should be dedicated by the civilian population to preserving the lives of the Nation's children. Is there any greater patriotic duty for the civilian population than to safeguard the welfare of the Nation's children?

Hence this year the plan is simpler and yet more far-reaching than ever before. It should be far more effective because through the women's committees not only the General Federation of Clubs but all the great women's organizations of the country will lend their co-operation.

Economy in unnecessary expenditures so as to save for essentials should characterize all work this year.

It is known that the examinations of the draft have resulted in a considerable number of rejections for physical defects which might have been remedied in infancy or early childhood if then recognized. Weight and height constitute on the whole a fair standard of development; how do the young children of the United States measure up to such a standard?

As a test of child welfare, to in-

augurate the Children's Year which begins on April 6, the anniversary of the declaration of war by the United States, a nation-wide weighing and measuring of babies and children of pre-school age is proposed. No general test of children of pre-school age has ever been made, and an examination of such children with special reference to weight and height is now proposed as the primary feature of the war time Children's Year.

The Children's Bureau will provide a record card which will be arranged in duplicate so that one-half can be sent in to the Children's Bureau and one-half kept by the parents. The record will be filled out by trained physicians and nurses in many places, but if parents can not take their children to an examining station they can secure cards and make the record themselves. The record card will show the fair standard for children of a given age and parents can judge for themselves where their children stand. Should there be any great divergence from this standard it is a warning that the children's health should be given medical consideration or should be carefully looked after. The records will all be gathered and tabulated by the Bureau. The weighing and measuring experiment can be conducted with little or no expense.

Weighing and measuring should begin as soon as possible after the sixth day of April, and should be concluded within sixty days. It has been suggested that where Baby Week celebrations of any sort are to be held the last six days of this period, being the first six days of June, should be taken for Baby Week. Such celebrations as are held, it is hoped, especially emphasize the need of public health nurses and of special protection for

young infants against the various dangers of summer heat.

One of the most remarkable developments of the war, a victory not heralded on front pages, yet which in time to come will be noted by all students of human welfare is the saving of infant life in England during the second year of the war. The report of the Chief Medical Officer of the Local Government Board, Sir Arthur Newsholme, published in 1917, shows for one sanitary district after another throughout England and Wales the number of babies who died before the war, those who died the first year of the war and the deaths for the second year of the war, 1916.

It is startling to turn over the pages of this report and to see that the general social confusion of the first year of the war resulted in a large increase in the number of babies who died. But in the second year of the war when the local government board was enabled to grant financial aid to the various sanitary districts and to secure co-operation in its policy of health visitors for every mother and baby, of health centers for consultation, of hospital care for sick mothers and babies, the rate went down not only far below the rate for the year before, but far below the rate previous to the war.

This record of life-saving in the midst of the strain of war by means so simple and so at command is, we believe, entirely without parallel.

Although the United States now lacks the machinery for such Federal Aid as England was enabled to grant to local work it has power enough locally to make a very creditable showing, and, it may be hoped, to pave the way for such Governmental provision as will enable the United States to show the even greater salvage which

its unexhausted condition makes possible.

Again, why should the United States, especially the newer rural States, be satisfied with a less favorable infant mortality rate than that which New Zealand can show? The New Zealand rate has steadily gone down, notwithstanding the war, and is now almost precisely half the rate for the registration area of the United States; that is, in New Zealand one baby in twenty dies, while in the United States one baby in ten dies. The most favorable State rate in the registration area is 70, that of Minnesota. Why should Minnesota not enter the race with New Zealand?

Information has just been received in this country that Dr. F. Truby King of New Zealand has sailed for Vancouver on his way to England. Dr. King is known as the active head of the New Zealand Society for the Health of Women and Children, an organization which, in cooperation with the Government, is credited with a large share of responsibility for the lowering of the New Zealand infant mortality rate in recent years. This Society was organized when Lord Plunket was Governor of New Zealand, and its nurses are known as Plunket nurses in honor of Lady Plunket, who gave much aid to the Society.

It is significant that Dr. King is now going to England to undertake similar work there at the request of a society in which Lord and Lady Plunket are moving spirits.

Dr. Truby King expects to be in the United States about three weeks. He writes that he wishes to be informed as to the latest developments in child welfare work in the United States, and his plan is to visit various cities where notable work is now under way. The

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visit of Dr. King just now gives added emphasis to the importance of the nation-wide campaign for infant welfare which the State and National Committees of Defense and the Children's Bureau are undertaking.

PULMONARY EDEMA.

W. A. Bastedo, New York (Journal A. M. A., Sept. 8, 1917), describes the phenomena of pulmonary edema, the factors favoring the increased production of tissue fluid causing it, such as increased intracapillary pressure; increased permeability of the capillary wall or excess of water in the blood. Also the factors favoring the removal of tissue fluid, such as lymph stagnation, diminished capillary absorption, and increased molecular concentration of the tissues so that they have increased osmotic pressure and take up

more fluid than normal or hold it more firmly. Between the production and removal factors there is great flexibility and accommodation, and probably the presence of more than one of the abnormal factors is required for the production of the edema, therefore the most important cause of pulmonary edema is failure of the heart and adequate respiratory movements are necessary. That acidosis is a cause of edema has been established and bacterial invasion has also been suggested. Anaphylaxis is also suggested as a possible cause by Rosenau and Anderson. But anaphylactic action in pulmonary edema has not been demonstrated. Bastedo reviews the treatment. First by improving the pulmonary circulation, and second, by attention to the contributory factors. In all cases, therefore, cardiac failure is to be treated by the usual efficient



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measures. Venesection is considered as one of the most reliable treatments in pulmonary pneumonia. Atropin may prove beneficial. It does not act, as asserted by some, to dry up the secretion as the edema fluid is a transudate and not a secretion, and in the author's opinion atropin gives little promise of value. Caffein in therapeutic doses is a decided stimulant and the inhalation and the use of strychnine are also mentioned as sometimes advisable. Artificial respiration has been found useful and the use of mechanical apparatus is suggested. The summary is given as follows: "In the treatment of pulmonary edema in pneumonia, the most reliable procedures are: strophantidin intravenously, caffeine subcutaneously, oxygen inhalation, venesection and perhaps counter-irritation to the chest. Supplementary treatment should be determined by the presence of acidosis or other associated conditions."

EPIDEMIC MENINGITIS.

In a long article in the Journal A. M. A., Sept. 8, 1917, Simon Flexner, New York, describes the mode of infection, means of prevention and specific treatment of epidemic meningitis. The article is incited by the appearance among the armed forces of the United States of this disease, and for the purpose of bringing the essential facts of our present knowledge of that disease to the immediate attention of the medical officers having charge of the health of the troops, and also of civilian physicians responsible for the health of the civil population. The disease is unknown in nature excepting from its human hosts. Its persistence in the community is not attributable so much to active cases as to carriers, and the danger is greatest when large bodies

of men are brought together as in military camps. The secondary carriers do not usually become chronic carriers, but only harbor the germ for a longer or shorter period, while a small number of them acquire the disease. The meningococcus enters and leaves the body by way of the secretions of the nasopharyngeal membrane. No other avenue of entrance is known. It goes from the mucous membrane to the meninges, whether directly through the nervous system along the olfactory nerves, or indirectly by way of the blood is not yet established, though the former route is most probable. The potential dangers from sufferers with the disease and healthy carriers is unequal, as the latter range around through the population, while the former are confined and can only cause danger to immediate attendants. In both cases the dissemination is identical, the more indirect communication is by contact and insects, etc. Flexner describes at length the method used for detecting carriers and their recognition. The characteristics and types of the meningococcus are described, as well as the preparation of polyvalent and monovalent antimeningococcus serum. The commercial standardization of the serum is highly desirable, but Flexner goes more at length into the description of the monovalent type. The number, duration and treatment of carriers is an important part of the article, and he gives statistics as far as obtained. He says the task of examining large numbers of persons in a military camp, for example, is not an impracticable one. In an English report on the disease, an instance of the swabbing of 10,000 men is recorded. The means used to make carriers harmless are essentially two: first, artificial immunization, which has failed completely; second, direct treatment of

the nose by the various methods of swabbing, douching, spraying, etc., with chemicals, some of which have been reported as more or less successful. The diagnostic methods are also described as well as the local treatment. Lumbar puncture has been used for both diagnosis and treatment, besides the serum treatment. The steps as given here are as follows: "Diagnostic lumbar puncture, the results of which arousing suspicion, is followed immediately by the injection of 30 c.c. of the antimeningoococcal serum in adults and corresponding doses in children. The cases having been proved by bacteriologic examination to be epidemic meningitis, two or three additional doses are administered at successive twenty-four hour intervals, irrespective of any favorable outlook, unless there are definite indications to the contrary. The purpose of the three or four successive doses is to guard against relapse when the symptoms seem to yield completely to the first one or two injections of the serum. The number of injections required by a case of average severity is from four to six. With the more violent onset of the disease, or when it has come under observation at a later stage, the procedure is the same, except that it may be advisable to repeat the injection at twelve hour intervals on the first day and even afterward. In a very few cases the meningococcal infection without accompanying changes in the spinal fluid, and intravenous injections of the serum are indicated and have been successfully employed in larger doses. The maximum dose of the serum is not 30 c.c., but may be 40 or even 60 c.c., but this is exceptional. The administration of the serum is to be continued till the temperature has become normal and remained so for two days or more.

Full descriptions as to the methods of lumbar puncture and other methods of using the serum are given. Flexner also mentions serum disease, which, however, is not to be mistaken for a relapse. Usually an immediate diagnosis of the condition can be made by lumbar puncture and examination of the spinal fluid. He quotes his conclusions reached after critical study of 1,300 cases of the disease treated with the serum supplied by the Rockefeller Institute: "It is our belief that the analyses of histories of cases of epidemic meningitis which have been presented, furnish convincing proof that the antimeningoococcal serum, when used by the subdural method of injection, in suitable doses and at proper intervals, is capable of reducing the period of illness; of preventing, in large measure, the chronic lesions and types of the infection; of bringing about complete restoration to health, in all but a very small number of the recovered, thus lessening the serious, deforming and permanent consequences of meningitis, and greatly diminishing the fatalities due to the disease." All these desirable results, however, are contingent on the production and administration of adequate preparations of the antimeningoococcal serum and unless proper control and standardization of the serum are undertaken it may be feared that our hopes will not be realized.

BLOOD PRESSURE IN OBSTETRICS

J. L. Slemmons, New Haven, Conn., (Journal A. M. A., Sept. 8, 1917), summarizes his observations of the value of blood pressure observations in pregnant women substantially as follows: Blood pressure observations afford the means for the early detection of preeclamptic toxemia and the severity of

the auto-intoxication, and also are useful occasionally in the differentiation of pyelitis from the albuminuria of pregnancy. They also give a measure of the efficiency of treatment of active eclampsia and a method of obtaining the ultimate prognosis in these cases. When patients are carrying a double burden of chronic valvular heart trouble and toxemia, knowledge of the blood pressure is indispensable as a therapeutic guide. Since knowledge is also required from estimating the work the heart is doing, by this means we shall probably obtain a more timely method of recognizing the approach of a breach in compensation in chronic valvular heart disease, and therefore be able to decide the question of the induction of labor as a prophylactic. He has tried the use of lumbar puncture in five cases of eclampsia, as reported on by Wilson, and considers that while it may not be implicitly relied on to check or modify the convulsions, it adds another therapeutic measure to our arsenal. In two desperate cases immediate improvement followed the measure.

POLIOMYELITIS.

R. A. Hibbs, New York (Journal A. M. A., Sept. 8, 1917), reports eight cases of operation for scoliosis after poliomyelitis long after the acute attack. The operation was in every essential feature precisely the same as that performed on patients with Pott's disease, consisting of dissecting up the periosteum of the spinous process down to the base of the transverse process and in curetting the lateral articulations there, which are always easily reached in children and in most adults. After this is accomplished, a small piece of bone is elevated from the laminae and turned down, its free end

resting on the one next below. The spinous processes are then partly divided with forceps for that purpose and broken down, so that the tip of one comes in contact with the base next below it. That is all that has to be done to the bone.

VERTIGO.

I. H. Jones, Philadelphia (Journal A. M. A., Sept. 8, 1917), says that the conception that all vertigo from whatsoever cause is peculiarly an ear study is the outcome of recent studies by Barany methods. The old classification of gastric vertigo, renal vertigo, idiopathic vertigo, etc., is out of date, and we are now convinced that vertigo is impossible without an irritation, impairment or destruction of some portion of the vestibular apparatus. It is true that ear tests do not furnish absolute, final and complete information as to everything that has to do with vertigo, but they open up a definite method of approach to our studies and give us the opportunity for accurate diagnosis and intelligent treatment. Following is the classification which Jones and Dr. Louis Fisher offer and which they believe includes, so far as our present knowledge extends, all the causes of vertigo: "1. Involvement of the ear mechanism by a lesion in the ear itself. 2. Involvement of the ear mechanism by a lesion involving the intracranial pathways from the ear.

3. Involvement of the ear mechanism by ocular disturbance, either through the eye muscle nuclei, or through association fibers from the cuneus to the cortical terminus of the fibers from the ear, in the posterior portion of the first temporal convolutions. 4. Involvement of the ear mechanism by cardiovascular disturbance. 5. Involvement of the ear

mechanism by toxemias from any organ or part of the body." Jones discusses these causes seriatim, giving illustrative cases, and says the first thing to be done in any given cases is to examine the ear mechanism which is responsible for the ear vertigo. If the responses to the tests are abnormal they will aid in locating the point of disturbance, either within the ear itself or along its pathway within the brain. If the responses to the Barany tests are normal, we have narrowed down the diagnosis to (1) a purely functional neurosis; (2) ocular disturbance; or (3) an evanescent toxemia the source of which must be looked for. The test should be as universally used in any case of vertigo as is the Wassermann test in suspected syphilis, or the urine tests in diabetes.

VERTIGO.

T. H. Weisenburg, Philadelphia, (Journal A. M. A., Sept. 8, 1917), says that it would be important if we could diagnose the type of vertigo from the history given by the patient in all cases. While this can be done to some extent, mistakes are common. He describes the different types of vertigo from intracranial causes. Tumors of the hemispheres do not produce vertigo unless there is considerable increase of intracranial pressure, therefore vertigo with cerebral tumors should arouse a suspicion of intracranial pressure or of disease in the posterior cranial fossa which nearly always causes vertigo either by direct involvement of the vestibular fibers or by their involvement by pressure. Grainger Stewart and Gordon Holmes have endeavored to differentiate the forms of vertigo into, first, the sense of movement of self or surrounding objects, and second, an indefinite giddy feeling as generally

described. Weisenburg has not found this differentiation generally practicable. The second type should have the greatest localizing value because it can only be present when the head or eyes are turned in a certain direction. An analysis of his operative cases and of tumors in the posterior fossa gave some interesting results, and he describes the observations in certain patients. A patient with a left cerebellopontile tumor growing from the eighth nerve and secondarily involving the seventh nerve and the pons and cerebellum experienced vertigo only when he turned to the left suddenly. In a case with a tumor growing from the right cerebellar peduncle into the angle, involving the eighth nerve secondarily, the patient felt dizzy only when he sat up, and still another patient in whom a right cerebellar angle tumor invaded the pons and cerebellum by pressure and there was also involvement of the fifth, seventh, eighth, ninth and tenth nerves of the right side, there was no vertigo whatever. In this case there was no increase of intracranial pressure. He could carry on descriptions of such cases indefinitely, but he says it is apparent there are no focal or recognizing values in the history of the patient's symptoms. The conditions on which vertigo depends are first increase of intracranial pressure involving the vestibular fibers indirectly, or the lesion involves and destroys these fibers directly. A slowly gliomatous tumor may not give any symptoms at all. Finally, the conclusion may be reached that vertigo in itself is not a focal symptom. Certain organic cerebral diseases, as is well known, like arteriosclerosis most commonly, frequently produce dizziness, and one hardly needs to say that ocular causes are a frequent source. According to

Weisenburg's observation, however, the nervous patient is the more frequent subject, and some persons can produce the sensation of dizziness by simply remembering it. Vertigo is especially common in the traumatic neuroses when the head is injured and is frequently cured by a verdict for damages. The neuroses, however, are often associated with definite labyrinthine involvement, and in these cases the dizziness is amazingly exaggerated. One of the most difficult things to diagnose is between aural vertigo and epilepsy, and they occasionally occur together. Weisenburg speaks of the value of the Barany tests in intra-aerial location, but he gives a caution against accepting them too fully, as he considers that we do not yet definitely know the fiber tracts in the brain.

VERTIGO.

G. E. Shambaugh, Chicago (Journal A. M. A., Sept. 8, 1917), describes what is usually called Meniere's disease and which was formerly supposed to be due to hemorrhage in the labyrinth. Many writers have objected to the title as covering too much, but the term Meniere syndrome has come into general use to designate attacks of vertigo accompanied with tinnitus and deafness irrespective of the cause, and it is really descriptive of a group of symptoms characteristic of certain aural diseases. In order to interpret intelligently the symptoms of vertigo arising from disease of the labyrinth one must keep in mind a few fundamental facts. The labyrinthine mechanism for preserving bodily equilibrium works through the medium of tonus impulses to the skeletal muscles, keeping these in constant stimulation. The tonus impulses from one labyrinth stimulate the muscles for the most part

on the opposite side and a sudden alteration in the tonus from one labyrinth disturbs this equilibrium and causes vertigo. This is temporary because the compensatory tonus rapidly restores the equilibrium. There is no doubt that a hemorrhage into the labyrinth will cause Meniere's syndrome, but it is in all probability a rare occurrence, whereas vertigo from primary disease of the labyrinth is by no means uncommon. The Meniere syndrome according to Shambaugh may be due to various conditions, such as advances otosclerosis, syphilis, neuritis of the eighth nerve, etc., but by far the most frequent cause of vertigo is association with a chronic degenerative process developing independent of syphilis or infectious fevers and involving as a rule the peripheral neurons of both the cochlear and the vestibular nerves. When the cochlear nerve is involved the characteristic symptoms are a continuous high pitched tinnitus and a more or less extensive defect in hearing at the upper end of the tone scale. The involvement of the vestibular nerve is not infrequently associated with attacks of vertigo, always an indication of an increase in the degenerative process. It is possible by means of the rotation tests and the caloric stimulation to demonstrate the loss of function taking place in the semicircular canals in these cases. It seems entirely probable that some foetal infection and neuritis of origin are the important factors and the acute exacerbations in the way of vertigo are easily accounted for. Shambaugh sums up as follows: "1. Primary disease of the labyrinth produces attacks of vertigo whenever the vestibular apparatus is involved by an acute process. 2. Hemorrhage into the labyrinth is much less common than was formerly supposed. 3. An em-

bolus lodging in the labyrinthine artery occurs especially in caisson workers as the result of gas embolism, and gives rise to the characteristic Meniere syndrome. 4. Syphilis in the secondary and tertiary stages, as well as in hereditary syphilis, not infrequently involves the internal ear and gives rise to vertigo. 5. Neuritis of the eighth nerve from overdoses of drugs, such as quinine, tobacco and alcohol, may produce neuritis of the eighth nerve with the Meniere syndrome. 6. Toxic neuritis of the eighth nerve as the result of infectious fevers frequently gives rise to attacks of vertigo. 7. The most frequent occurrence of vertigo is in connection with a primary chronic degenerative process involving the peripheral neurons of the eighth nerve and occurring independent of syphilis or the infectious fevers. 8. The probable cause for many of these cases is to be found in a neuritis of the eighth nerve, as the result of some chronic focus of infection, such as is so frequently seen in chronic disease of the faucial tonsil. 9. Attacks of vertigo occurring in connection with acute auricular rheumatism are the result of neuritis of the eighth nerve and a symptom of the systematic infection from some primary focus."

AURAL VERTIGO.

P. D. Kerrison, New York, (Journal A. M. A., Sept. 8, 1917), says he thinks the majority of experienced otologists will confirm him in his statement that severe vertigo from suppuration in the middle ear without labyrinthine involvement is not sufficiently common to be the subject of a prolonged discussion. At least the distinguishing features of the vertigo in such cases may be more profitably analyzed in connection with special case reports.

The following conditions, however, require passing mention: 1. A few cases of chronic middle ear suppuration have been observed or reported in which granulations in the region of the oval window and pressing on the stapes have caused vertigo, which has been relieved by careful removal of the granulations. These are very rare, probably not more than one in 5,000 cases of middle ear suppuration. 2. Vertigo depending on a defect either congenital or from disease in the labyrinthine capsule, the membranous labyrinth remaining intact, is a somewhat rare condition. Such a case was seen and discussed in the Manhattan Eye and Ear Hospital. 3. Aural vertigo in middle ear suppuration depending on a so-called paralabyrinthitis—a congestion extending throughout the labyrinthine capsule to the membranous labyrinth—is usually easily distinguished and need not be discussed. 4. Aural vertigo due to serous labyrinthitis need not be described, since it differs in no way from that due to suppurative labyrinthitis. The practical therapeutic deductions from this hypothetic lesion are nearly covered in the statement that a distinctly vestibular type of vertigo accompanying a middle ear suppuration and coupled with complete unilateral loss of hearing should be treated as far as possible expectantly. In all the foregoing conditions the vertigo is distinctly vestibular in type; Kerrison knows of no distinct type of vertigo characteristic of suppurative disease confined to the tympanum. Two clinical types of vertigo occur in suppurative labyrinthitis. First, that of the onset or acute stage, and second, the vertigo of the latent or quiescent stage; but in whatever stage the physiologic basis is the same—diminution or loss of vestibular irritability in the diseased

ear. The vertigo of the acute stage is always associated with spontaneous vestibular nystagmus, subjective sensation of rotation and tendency to fall. In complicated cases the vertigo, the nystagmus and the ataxia tend quite rapidly to subside together. The patient may still complain of vague indefinite sensations of dizziness, which, however, cannot be traced to the labyrinth. The vertigo of the labyrinth. The vertigo of the latent stage is less constant or invariably prominent or noticeable. After the characteristic symptoms of the acute stages have disappeared, there may be sudden violent and unexpected disorders of equilibrium, and the patient will require reeducation as to the various body postures and muscular actions. The surgical significance of the latent stage is that of a focus of infection in a small bony space, presumably walled off by exudates, but subject to further breaking down with spread of the infection to the meninges. The general plan of treatment is absolute rest in bed in the acute stage and no bone surgery unless it is imperatively indicated. In

the quiescent or latent stage a radical operation combined with careful surgical drainage of the labyrinth is the only sound surgical policy. There is another rare class of cases in which the patient, following a chronic middle ear suppuration, develops characteristic vestibular vertigo occurring in repeated attacks. Such a patient has the liability of serious intracranial involvement, and in Kerrison's opinion it is a wise operation. Vertigo in any suppurative operation. Vertigo in any suppurative lesion of the ear should always be taken seriously, but we should bear in mind that patients do not die, however, from suppurative labyrinthitis itself, but from a secondary intracranial infection. There is no absolutely safe method of treatment. In each individual case one must take into account the immediate chances of recovery with or without operation, the possible influence of any operation in spreading infection, and the stage of the disease in which operative intervention is safest, together with the ultimate risk to life if the labyrinthian focus of infection is not surgically eliminated.

Increased Popularity of Electricity and Radium

Dear Doctor:

Both of these remedial agents have passed through the "novelty" stage and are now being used and endorsed by hundreds of medical men of unquestioned standing and ability. Electricity and Radium already have an important place in modern medical practice. But, without doubt, much is yet to be learned about their value in therapy.

PHYSICIANS SHOULD QUALIFY. If these two modalities can do even a part of what is claimed for them, then physicians should qualify themselves by reading, investigation and installation of equipment to use them in their practice, when indicated. The physician's obligation to his clients, no less than his duty to himself, require this.

COMMERCIAL USES OF ELECTRICITY. In addition to the many and varied uses for which physicians have found electricity of value in medical science, they are now employing it extensively for commercial purposes, such as electric vehicles, lighting and telephone systems for offices, homes, sanitariums, hospitals and public institutions.

AS A REMEDIAL AGENT. Radium is coming into use more and more by physicians, particularly in sanitariums and hospitals. In many internal, as well as external, conditions, Radium is recognized as an important therapeutic agent.

DISCUSSION INVITED. The editorial staff of this Journal—your Journal—is in full sympathy with this movement, and invites frequent contributions in the way of case reports, discussions, and other clinical notes for publication. It is also hoped that arrangements can be made for having at least one paper on each of these subjects for our next, as well as subsequent, annual state meetings.

CLINICAL DATA AVAILABLE. The more progressive manufacturers, some of whom are listed below, have rendered valuable service to the profession by collecting clinical data and publishing it in the form of reprints for free distribution to interested physicians. The reprints are, of course, in addition to their regular catalog literature, and may be obtained for the asking.

AMERICAN VERONAL. In the Trading with the Enemy Act recently passed by Congress, provision was made for the licensing of American manufacturers by the Federal Trade Commission to produce articles and substances patented in this country by enemy aliens. Already a number of chemical manufacturers have taken advantage of this provision, among them The Abbott Laboratories of Chicago, which has applied for and secured a license for the manufacture of Veronal, which, however, will be known hereafter by the name BARBITAL. This is the official name given it by the Federal Trade Commission, and this name must be used as the principal title by every firm manufacturing it under license from our Government.

The Abbott Laboratories have already begun the manufacture of Barbital (formerly known as Veronal), and we understand that in short time it expects to have an abundant supply of this well known hypnotic, and that it will be made generally available through the trade. The quality of the product is guaranteed. Indeed before a license is granted for the manufacture of any of these patented synthetics in the United States, the product must be submitted to rigid investigation at the hands of a chemist designated by the Federal Trade Commission. In this way Americans are assured of supplies of the American-made products at reasonable prices, and the manufacture of fine American chemicals is given the stimulus which it requires.

Those interested are urged to communicate with The Abbott Laboratories, Chicago.

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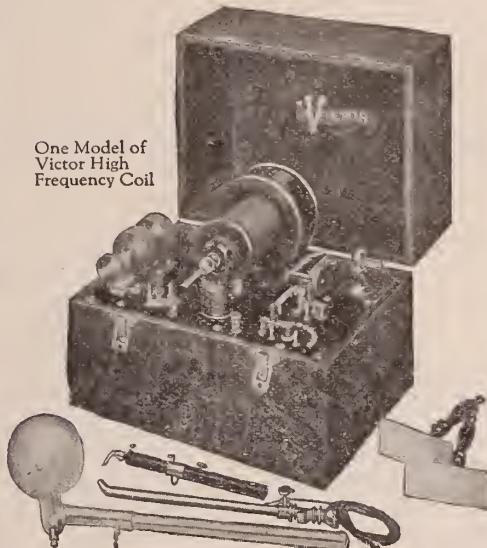
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The Journal OF THE South Carolina Medical Association



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EYE, EAR, NOSE, AND THROAT.

E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

DEATH OF DR. S. C. BAKER.

As we go to press we learn of the death of Dr. S. C. Baker of Sumter, Chairman of Council of the South Carolina Medical Association. Proper tribute will be paid Dr. Baker's memory by the Committee on Necrology and later published in the Journal.

There will be universal sorrow throughout the profession of this state from the sad news that Dr. Baker has passed away. His was a positive and forceful life both within and without the profession and we reproduce the Editorial in the State of March 22d which expresses the feelings of many of us at this time:

Dr. S. C. Baker.

The people of South Carolina have lost one of their most valuable citi-

zens by the death of Dr. S. C. Baker of Sumter, captain in the United States Medical Reserve Corps, and the American army is deprived of one of the most devoted and accomplished of the many surgeons who early in the war volunteered their services to their country.

Dr. Baker was more than a physician and surgeon, great as was his skill and large his ability in his profession. He was a sterling citizen who engaged with his whole heart in every work that offered for the improvement and growth of Sumter. He was willing to take upon himself unusual burdens for the public good outside of his profession and, in a community notable for generous men who give of themselves and of their resources to advance and help their fellows, he was one of the foremost. In this war no more useful life has been

given for the defense of our common country. Everywhere in South Carolina informed people know of the noble work that he has done. There is the greatest sympathy for his wife and children and with all the people of Sumter in the profound loss that they have suffered.

AIKEN MEETING—HOTEL ACCOMMODATIONS.

The Secretary made a visit recently to Aiken and in cooperation with the local profession and the citizens has perfected arrangements for the coming meeting of the State Medical Association. We are delighted that the magnificent tourist hotels for which Aiken is famous, have agreed to remain open for the entertainment of the Association.

The Highland Park Hotel will be the headquarters and a flat rate of \$5.00 per day has been made. The Wileox, another tourist hotel with more than a local reputation for good service, will make the same rate. The Olwell offers a rate of \$2.50 to \$3.00. This Olwell is the commercial hotel of the city. There are other hotels available and names will be published in the final program. The Highland Park Hotel is comparatively new and will accommodate more than one hundred members and has been selected as the official headquarters. This is a magnificent hotel with splendid accommodations. There are extensive golf links for those who care to indulge in this sport.

The House of Delegates will probably meet at the headquarters hotel and the General Association be held at the Thestone Theatre, which has been generously tendered by the managers. This Theatre is equipped with every

convenience, moving picture machine, etc.

The final program will be out shortly and mailed to every member of the Association and in addition it is hoped that a special Aiken number of the Journal may be published prior to the meeting.

SECURE RESERVATIONS NOW.

It is advisable to write the headquarters hotel especially for reservations in order that the manager may know about how many guests to expect. Of course the other hotels mentioned may also be written to.

THE LADIES EXPECTED AT AIKEN

The Committee of Arrangements for the Aiken Meeting will make ample provisions for the wives and daughters of the visiting physicians and it is expected that many will take advantage of the opportunity to visit one of most noted health resorts in the United States. At this time of the year the city of Aiken is one of the most attractive and interesting cities in the south.

PROVISIONAL PROGRAM MEETING SOUTH CAROLINA MEDICAL ASSOCIATION, AIKEN, S. C., APRIL 16, 17, 18.

(To be rearranged on the final program.)

Address: "Gastro-Intestinal Diseases in the Army." Major Seale Harris, Surgeon Gen. U. S. Army, Washington, D. C.

Address: (Title unannounced) Dr.

Martin H. Fischer, The Cincinnati General Hospital, Cincinnati, Ohio.

Address: "The Early Diagnosis and Treatment of Cerebro-Spinal Meningitis." Major Herrick, M. R. C., Camp Jackson, Columbia, S. C.

Some Remarks on Gall Bladder and Duet Surgery. Dr. R. Lee Sanders, Memphis, Tenn.

Intussusception in Infants with a report of two cases. Dr. D. Lesesne Smith, Spartanburg, S. C.

(Title Unannounced)—Dr. R. M. Pollitzer, Charleston, S. C.

Abnormal Obstetrics. Dr. G. Franser Wilson, Charleston, S. C.

Urinary Caleuli-Diagnosis and Treatment. Dr. E. C. Baynard, Charleston, South Carolina.

My Experience with the Use of Mercury Intravenously. Dr. William R. Barron, Columbia, S. C.

The Importance of Early Recognizing Mental Disorders. Dr. J. F. Munnerlyn, The State Hospital for the Insane, Columbia, S. C.

The Conduct of the Physician and the Pharmacist in the Treatment of Drug Addicts. Dr. Louis D. Barbot, Charleston, S. C.

Nasal Obstructions as a Causative Factor in Middle Ear Diseases. Dr. W. C. Twitty, Rock Hill, S. C.

Common Cold. Dr. E. W. Carpenter, Greenville, S. C.

Captain Clyde F. Ross, M. R. C. Camp Greene, Charlotte, N. C. (Title Unannounced.)

The Work of the Medical Advisory Board in the Draft. Dr. Kenneth M. Lynch, Member Medical Advisory Board, Charleston, S. C.

Application of Military Sanitation in Small Towns and Rural Districts. Major F. L. Parker, Charleston, S. C.

Heat in the Treatment of Inoperable Cancer. Dr. W. W. Fennell, Rock Hill, S. C.

The Development of a Bureau of Child Hygiene by the State Board of Health. Dr. E. A. Hines, Seneca, S. C.

A Case of Ectopic Pregnancy with Appendicitis. Dr. C. B. Epps, Sumter, South Carolina.

Dr. Pinkney V. Mikell, Columbia, S. C. (Title Unannounced.)

Dr. R. L. Leak, State Hospital for the Insane, Columbia, S. C. (Title Unannounced.)

Commitment of the Insane. Dr. C. F. Williams, Superintendent of the State Hospital for the Insane, Columbia, South Carolina.

The Value of the Milk Diet in the Cure of Chronic Diseases. Dr. Sophia Brunson, Sumter, S. C.

Dr. A. R. Taft, Charleston, S. C. (Title Unannounced.)

Some Aspects of Acute Middle Ear and Mastoid inflammation in Children. Dr. J. W. Jersey, Greenville, S. C.

Dr. W. F. R. Phillips, Medical College of State of South Carolina, Charleston, S. C. (Title Unannounced.)

Epidemiology of Epidemic Cerebro-spinal Meningitis. Dr. James A. Hayne, State Health Officer, Columbia, South Carolina.

The Typhoid Carrier. Dr. F. M. Durham, Columbia, S. C.

The diagnosis and treatment of Appendicitis Complicating Pregnancy, Dr. Geo. H. Bunch, Columbia, S. C.

JAUNDICE.

Splenectomy is a specific for hemolytic jaundice. Simple catarrhal jaundice usually clears up without treatment. Jaundice that is significant surgically is of the obstructive type. Any operative procedures, therefore, are necessarily made for the purpose of overcoming the obstruction to the outflow of bile. The conditions respon-

sible for practically all cases of obstructive jaundice are stones in the bile ducts, benign strictures of the duets and obstruction due to malignant neoplasms.

Patients suffering from obstructive jaundice that has existed for ten days or longer are usually poor surgical risks. The tissues soon reach a point where reeuperative powers are markedly reduced. It has been observed by some surgeons that the tissues will not stand longer than three weeks the deep jaundice from complete obstruction, the result of stones. Hemorrhage is quite a troublesome feature. The presence of the bile in the body fluids prolongs the clotting time of the blood, and oozing not infrequently follows operations in such alarming proportion that often patients lose their lives from loss of blood. This tendency increases proportionately with the length of time jaundice has existed. The various salts of calcium have been administered prior to surgical operation for the purpose of increasing the coagulability of the blood. Some favorable results have been reported, while it is considered of doubtful value by others. Horse serum and human serum are of value at times to check oozing. Probably the best agent yet discovered for the purpose of controlling hemorrhage is the transfusion of whole human blood. This may be done just prior to the operation. Or if oozing continues following an operation, it is suprising how effectual transfused blood will be in controlling it. It is a wise preeaution to have such patients grouped and a suitable donor acesible in case bleeding becomes troublesome. The sodium citrate method of Lewishon is probably the most applicable in all ease sheeause the blood can be drawn in an operating room and transported to the patient's room.

The presence of the citrate does not seem to exert any ill effect upon the coagulation time.

Jaundice is a late manifestation of gall bladder disease. It occurs when the stone or stones have passed into the common duct and obstruct the outflow of bile, causing it to dam into the biliary passages and from there it is taken into the blood stream. Jaundice oeours in about 20% of all cases of cholelithiasis and in only 33% when stones are in the common duct. When severe in degree and long continued it is usually due to stones impacted in the duct. Jaundice due to this type of obstruction usually clears up as soon as the oedema and swelling subside, the duct dilates and the bile current passes around the obstructing stone. Chills and fever are quite common. This syndrome was originally classed as malignant malarial jaundice. The gall bladder is sparsely supplied with lymphatics and hence absorption is limited. We do not see chills, fever, sweats, etc., when the stones and infection are limited to the gall bladder. The cystic and common duets are richly supplied with lymphatics, allowing absorption to take place and hence the chills, fever, sweats, etc., are quite common when the obstruction and infections are located here. Stones bruise the mueosa and produce abrasions and ulcerations which allow infected material to get into the circulation. For many years this syndone has been associated with common duct stones, and when the history is typical one can be reasonably certain of the diagnosis before operating. In this type of obstruction, **pain** always **precedes** the jaundice, chills and fever.

Benign strictures of the bile duets frequently follow injury during gall bladder operations. Frequently they are the result of cicatricial contraction

from ulceration and slough due to stones. In either event, to overcome the jaundice it becomes necessary to excise the stricture and reconstruct the duct by surgical intervention. The malignant conditions which produce jaundice are usually cancer of the common duct or cancer of the head of the pancreas. In such cases jaundice is usually the first symptom and it is **painless**. It is unaccompanied by chills or fever except in cases where infection is present. The jaundice is usually continuous, associated with emaciation, until death supervenes. Palliative treatment may be instituted to relieve such conditions. The fundus of the gall bladder may be anastomosed to some portion of the gastro-intestinal tract. Some surgeons prefer to make the anastomosis between the gall bladder and the stomach; others, the duodenum; others, the jejunum; and still others, the colon. Equally good results have been obtained in all these types of anastomosis.

R. Lee Sanders, M. D., Memphis, Tenn.

MOBILIZING THE PROFESSION FOR WAR.

Until the entire medical profession of the United States, or at least those who are mentally and physically fit and within the age limit, are mobilized within the Medical Reserve Corps of the United States Army, not until then can we give to the Surgeon General that efficiency which he so badly needs in having a large Body of Medical Officers upon whom to draw.

You may never be called, at the same time your joining the Medical Reserve Corps and placing your services at the command of your country, clearly indicates the patriotism which the medical profession, as a whole,

should evince and which we must manifest if we are to win the war.

Every doctor must realize that success depends upon a carefully selected and thoroughly trained Body of Medical Officers. By careful selection, we mean the placing of a medical officer in a position where he is best fitted for the service, and only by having an immense Corps or the entire profession mobilized upon a war basis, can we serve our country to the best possible advantage.

This mobilization of the entire profession should come from within the Body itself, but every physician coming within the requirements of the service, as to age and physical fitness, should seriously consider this suggestion and not wait for complete mobilization but apply at once for a commission in the Medical Reserve Corps of the United States Army.

It is not only for the combatant forces that medical officers are required but for sanitation, hospital camps, cantonments and in other departments where the health and life of the forces are dependent upon the medical officer.

We have within the profession a sufficient number of doctors to fully meet the requirements of the Surgeon General's Office whatever they might be, but to be of service, you must join the Medical Reserve Corps to enable you to meet the appeal which is now being made for a large and efficient Medical Reserve Corps upon which the Surgeon General may draw as requirements demand.

THE NEEDS OF THE MEDICAL SERVICE.

Under the above caption, Lieut. Col. R. E. Noble, M. C., U. S. A., presented before the last meeting of the Southern

Medical Association, a most admirable paper, which convincingly answers the many questions asked of the Department, and which have caused perplexing hours of thought with many doctors.

The communication appears in full in the December issue of the Southern Medical Journal and should be read by every doctor in this country.

In a previous paper by the same writer, presented prior to the time that the United States entered the world struggle, as in the above referred to communication, Col. Noble said: "On the medical profession rests a heavy responsibility, for with the medical profession rests the subject of medical preparedness."

This is a particularly impressive paragraph and pregnant with truth, and it's meaning should sink deep into the heart of every doctor in America. What was a fact before we entered the struggle is more than a fact now, since we have joined forces with our Allies in a world war, and which will only be terminated by the success of our arms.

We have not a sufficient number of medical officers to care for the combatant and other forces now in training. With the new draft soon to be called and the possibility of the raising of an army of between five and ten million, as has been authoritatively foreshadowed, we would repeat "On the medical profession rests a heavy responsibility, for with the medical profession rests the subject of medical preparedness."

The responsibility of the medical profession of the United States and its importance in the successful outcome of the war cannot be too forcibly impressed upon every doctor who is mentally and physically fit and within

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the age limit, and they are urged to offer their services now.

That the Surgeon General should have an immense Corps of Medical Reserve Officers upon which to draw, enabling him to place the individual where he will be best fitted for the service is manifestly apparent. This will mean efficiency and by efficiency alone

can the responsibility now resting upon the medical profession of this country be lessened.

Apply at once for a commission in the Medical Reserve Corps and thus relieve the responsibility which you owe to your country, your profession and yourself.

ORIGINAL ARTICLES

PRESIDENTIAL ADDRESS BEFORE ANDERSON COUNTY MEDICAL SOCIETY, 1918.

By S. Clarence Dean, M. D., Anderson, S. C.

I WANT to thank the members of the society for the honor they have conferred upon me by placing me at the head of the medical organization of our county, I certainly feel honored and thank you one and all very kindly.

It strikes me that in the present crisis that we should all feel honored that we belong to a profession that has so nobly and unselfishly responded to the call of its country. The medical profession has always gone about its duties unselfishly and unswervingly; and has stayed constantly at its post of duty night and day, hot or cold, wet or dry, and too, as we all know when the financial remuneration has been very meager and when the special training, its members have had to do and the hardships they have to undergo, are considered.

It must make any doctor have a certain sense of pride, that she or he belongs to a class of workers that have been among the first to respond to their country's call to help in a cause that will make the world a more humane and a better place for human

beings to live in and follow their pursuits in peace and happiness.

We can challenge any and all classes, or professions for there is no other class in which one-fifth of the able-bodied members, have volunteered their services to their country's call and to the needs of humanity. And it has not been limited to any certain age, or to men in a special line of work, but has been universal, the city Specialist, the country Doctor, the young and the old have all come forward and have offered their services; to undergo the hardships and privations of war at a decided loss to them, financially and otherwise.

In the future when the war clouds have passed and the history of the present struggle is written, I feel safe in saying that none will have aught to say against the patriotism of the medical profession, and all men will acknowledge that the medical fraternity did its "Bit."

To me this is a sad meeting, for as we look around we find vacant seats that were filled, by some of our brightest and most energetic workers for organized medicine, some of them are on foreign soil, others are in their own country training for the work on the other side, and still we have with us

today others that will be absent at subsequent meetings.

It strikes me that we should pass appropriate resolutions and send the proper greetings to members that are away—try to show to them that we appreciate their patriotism and that they still have a place in our society, and that we would appreciate any communication or paper from them.

In addition to the members that we have in actual service, several of our Co-workers have unselfishly given their time to work on exemption boards, and Red Cross work for which they should be commended.

To the ones of us that have been left at home or, have stayed behind on account of dependents, financial and other reasons; we too, have our bit to do for this war will be won at home as well as in the trenches, and it behooves us to do our best for the ones left at home, in many different ways—such as seeing that no soldier's family suffers while he is away, trying to keep up the proper morale in the communities in which we live, giving instruction in sanitary living, and see that all the sick are cared for.

We all realize that as quite a lot of the men are away that the burden will fall on the few and experience has taught us that more can be accomplished by concerted action than by individual effort, so it seems that the medical men should be closer drawn to each other than ever, and consequently we should have a better working society.

As we all know several partnerships have been broken up; and several working partners have been separated, but I hope each and every one of us will be ready and glad to lend assistance to any fellow in any way that he may. I sincerely hope that each member will try to attend the meetings of

the society, and will try to arrange their work even if increased, so that we can get together, discuss our troubles and help each other.

We hope that each member as he runs across cases in his work that are interesting to him or in anyway unusual, will keep the society in mind, so that he can report them at society meetings and give us all the benefit of his experience. In this connection I would like to say that in reading Journal S. C. M. A. in year 1917, I found only one or two papers contributed by Anderson Co. members. While possibly this may not be so essential, still I would like to see some improvement along this line, for I am sure that we have plenty of members that get up as good papers as the average if not the best published. And how is the profession of the state at large to know anything about us if we keep our "light under a bushel?" The subject of fees or a fee bill has always been one thing that has been tabooed in Anderson County Medical society since I have been a member. It does seem that with the present increase in cost of all the necessities of life, with an increase in pay for labor for all other work, that we will have to have either an increase in fees or require a better and prompter settlement of bills if we survive the storm. I suppose though, as custom has been that had best be left to each individual, to work out his own plan according to the dictates of his own conscience, but I feel sure that we will not find any Profiteers among our members.

I want to join with the other members of our society in thanking the retiring officers for the prosperous year our society has just passed through. The president's management has been absolutely fair and impartial, and we should congratulate ourselves

on the fact, that there has been no dissension or discord among the members, of our society.

As to the success of the society for this year: that depends to a great extent on each individual member.

I will do my duty to the best of my ability and I feel that each and every one of you are going to do the same. If we all do this, the answer will be a successful and profitable year; and we will have "The Home Fires Brightly Burning" for our absent members when they come back home.

THE TREATMENT OF FRACTURES OF THE ELBOW JOINT.

By E. C. Doyle, M. D., Seneca, S. C.

PROBABLY what I shall say in reference to injuries and fractures about the elbow is already familiar to most of you, still I think that repetition about so important a joint is helpful, so that we may have firmly fixed in our minds certain principles it will do no harm and is calculated to do great good for this in my opinion is one of the most useful if not the most useful joint in the human anatomy.

The joint which we use in the salutation of our friends, the joint with which we carry food to our digestive organs to nourish our bodies, and many other uses could be mentioned. However I shall not speak of these, but, pass on to treat in a very brief way the treatment of fractures of this joint.

If the soft parts are injured, of course they require attention, and the old maxim "Cleanliness is next to Godliness." Certainly holds true here, but, if you are a hater of the streptococcus and all other cocci to which the human body is heir, and

which cause so much havoc in that body, do for the sake of the science of the medical profession let soap and water alone, soap and water when used for ordinary cleansing purposes, where the skin is not broken will do. But do not dash it on wounded and lacerated tissues. I discarded it some years ago, and now use only iodine and alcohol "50%." Or tincture iodine (3%) straight. Unless there is much grease or oil about the wound, then gasoline is very good, but if soap and water, or even aseptic water is used it has not proven near so efficacious in my hands as the iodine and if you use the water and then the iodine, you had just as well not use the iodine at all, for the water causes the cells of the tissues to become oedematous and hence the iodine cannot penetrate between the cells in the wound.

Of course I shall not take the time of the association by speaking of what shall be done with divided soft parts e-g muscles nerves, fascia, etc. In case these parts are divided at the time of the fracture, any intelligent physician or surgeon knows they are to be re-united, by bringing axis cylinder to axis cylinder, sheath to sheath, etc., and so on. Of course with drainage, and before leaving these soft parts I wish to especially stress that in the electrathon is stripped of its soft tissues, it is very imperative, that it be recovered with normal skin with its underlying connective tissue, otherwise your patient will have great trouble in flexing the joint.

If there is much swelling of parts it is frequently very difficult, if not almost impossible to make a diagnosis of fracture. By all means wait until swelling subsides before tampering much with that joint, this can be hastened in several ways, either by bandage or by using evaporating lotions e-g,

keeping dressing wet with solution of citrate sodium, alcohol, acetic acid, etc.

Another point that is well to remember, the severe pain in a joint on motion is not always caused by either a fracture about the joint, or supposed inflammation in the joint, but where ever a tendon passes over a joint, there a bursa is interposed between that tendon and the joint, and some times that bursa is inflamed instead of the joint. Only about four or five months ago I had a patient who had his elbow injured by a locomotive, the joint was very painful and rigid upon examination, at first I did not know whether he had synovitis, a fracture, or an inflamed bursa, for there is a bursa intervening between the tendon of the biceps (passing on its way to its insertion in the head of the radius) and the elbow joint, by relaxing the biceps muscle, I was able to gently move the elbow joint without pain and without muscle spasm, hence it was bursitis that was giving him trouble.

Of course in diagnosis and treatment of this or any other fracture, the X-Ray in the hands of an intelligent man is very helpful.

In the treatment of fractures in or near this joint all honor is due to Mr. Robert Jones, of Liverpool, England, for it was he who first instituted this treatment, I mean the fixation of the fore-arm in acute flexion. In the last few years I have used this entirely to the exclusion of the old method of placing the fore-arm at an angle of 90° and while I have had no great number of cases I think about five or six in the last three and half or four years the treatment has been far more satisfactory to myself and the patients than the old method. In fact I consider the results 100% in every case save one, that is so far as deformity mobility and

function are concerned, in that one case the results was fully as good or better than most of my other cases had been, where the former method of placing the fore-arm at an angle of 90° was used, but results were not first-class in this one case because the treatment was not carried out as it should have been that is massage and passive motion were not begun as early as they should have been.

Drs. Newhoff and Wolf in their report of about two years ago, on one hundred cases of fracture treated by this method, (While not going into their report exhaustively) state that out of 29 cases where massage and passive motion were begun in the first seven days 27 cases had perfect results, two imperfect, that in 21 cases where massage and passive motion were begun the third week six cases had perfect and 15 imperfect results. That in 12 cases where massage and passive motion were delayed until the 5th week, only one case had perfect result and eleven imperfect.

In the other 38 cases passive motion and massage were begun at other intervals, but from the sixty-two cases which I give you here we can readily see that this is no unimportant part of the treatment, and my one case where results were not perfect tallies with their report.

To any one who is familiar with the anatomy of the elbow joint. He will wonder why surgeons have not always been treating fractures of that joint after this method. For it is the only way in which the parts are put to absolute rest, and thus, the fractured part brought back to its abiding place. As we know many of the flexors and pronators of the fore-arm take their origin from the internal condyle of the humerus, and thus when the fore-arm is extended to any degree whatever

they will pull the fragment downward and out of place. The supinators being attached to the external condyle, the same happens here, and your patient if treated after the old method will get well with more or less disability, and usually it is more.

Reduction. If fracture is above the condyles make traction on fore-arm, thus drawing the lower fragment downward, at the time pushing the end of the upper fragment backward, then slowly carry arm to acute flexion. If fracture is below this point or in the joint itself reduce by supinating the fore-arm, the while making traction and extension then slowly bring to acute flexion as above, maintain there, when placed in this position you have done away with all lever action of the bones of the fore-arm. The fracture is held in place by the olecranon, the aponeurosis covering it together with the tendon of the triceps from behind. Below and anteriorly by coronoid process of the ulna. Above anteriorly by the articular end of the humerus, which is much better than any artificial splint placed there by the surgeon, for in my limited experience splints placed about the elbow or any other joint actually do far more harm than good, as they cause the tissues to perish away, and I believe increase callus, and thus cause great impairment in the appearance and usefulness of the joint.

Different surgeons have devised various methods of bandaging this joint after having placed it in position. The idea in my opinion is, anything that will keep it there is all right, it matters not about the different methods of bandaging. In the cases I have had I found the best thing to hold it was two or three or possibly more strips of adhesive plaster placed around the fore-arm and arm, first placing a thin

piece of cotton or gauze in front of the elbow between fore-arm and arm to keep the skin from chafing. Then I pass a bandage about this more for appearance than anything else, afterwards placing a light pad of cotton or other material over the olecranon, and passing a bandage around the neck shoulder arm and fore-arm to starting place, which acts as a sling holding the arm in the sling by bandaging the hand and wrist to the sling and also the shoulder to the sling.

The first few days after dressing, the main features to look for is the circulation in the parts and the oedema. Of course they are interdependant. If the circulation becomes greatly interfered with on account of swelling, take down your dressings and extend fore-arm somewhat, which readily restores it, or if oedema is so great as to cause great discomfort to the patient usually a little extension relieves that.

I now arrive at the secondary part of the treatment and it is just as important if not more so than the primary, as this was shown very forcefully by the report of Drs. Wolf and Newhoff a digest of which I have already given you, that is massage and mobilization. This is absolutely essential and in my opinion a man would almost be guilty of criminal negligence if for any reason he did not practice it. Its object is to prevent stiffness in the tissues about the joint and to prevent their atrophy, some authorities claim that massage and passive motion will increase the callus, but just as trustworthy investigators have shown by experiment that in many instances such is not the case, but rather it actually decreases the size of the callus, not only that, I know that all of you have had fractures of the long bones which refuse to unite, which when allowed more freedom in movement of the ends of the bone, and

massage, union took place, hence I am not one of those who believe in absolute fixation of fracture, and in leaving them immobilized, but rather in early passive motion for in my opinion it quickens the repair process.

In this fracture I usually remove the dressings and begin slight passive motion and massage about the sixth or seventh day, and practice it with as little or no pain as it is possible to do. And by first using very gentle massage and very slight extension for ten minutes or more at each dressing there is practically no pain whatever. This of course is to be gradually increased at each dressing which I have usually done each second or third day after starting, though Newhoff and Wolf advise massage and passive motion every day. I doubt not that it is better. After each dressing the fore-arm is to be returned to acute flexion, I usually keep the dressing on for three weeks, but of course that varies somewhat in different cases. As to treatment of fractures which refused to be reduced by manipulation under an anesthetic or where a callus or fragment has interfered with the function of the Median, Ulnar or Musculo-spiral nerve

I shall not treat in this paper for the question of creating a false joint and chiseling away a callus is one we can leave to the specialist in this practice, though I have noticed that they differ among themselves in their practice and teachings about these things,

I shall not treat in this paper for the idea that it should have the one quality of brevity to recommend it if it had no other, and I must quit 'lest I destroy that quality. I have made an effort to make it of practical benefit to the everyday practitioner, who is occasionally called on to treat these fractures, and I want to impress on him just here that if he has not given this treatment

a trial I advise him to do so at the first opportunity, and if carried out as it should be will guarantee that his results will be far better in this class of injuries than they have been before under the old 90° angle treatment.

This is the treatment par excellence for any and all fractures in or near the elbow joint no matter where located, except that for the olecranon alone and of course we all know it should be put up in extension.

Read before the South Carolina Medical Association, Spartanburg, S. C., April 19th, 1917.

DISCUSSION.

Dr. Kirkpatrick, Pacolet, S. C.

In more than twenty years practice, up to about four years ago, I had had only one fracture at the elbow. This was a fracture of the olecranon. About four or five years ago I began having patients with fractures at the elbow and up to the present time have treated eight such cases. The first case I put up on a right angle anterior splint and got a good result by manipulating the arm a great deal after removing the splint. About this time my attention was attracted to the literature on the subject, and in referring to Da Costa's Surgery, of which I am very fond, I found that he quoted Dr. Jones of Liverpool, and recommends putting up elbow joint fractures in acute flexion. Since that time I have treated my cases (Seven in number) in this way. Tie a wisp of gauze in the bend of the elbow to prevent chafing. It is important that the artery be not caught between the fractured bone. I have had splendid results. One case can not quite straighten the arm because his father was too busy to bring him to my office for manipulations. I have not manipulated the joint as often as Dr. Doyle recommends, and

for that reason likely, I have had to resort to chloroform in two or three of my cases in order to break up existing adhesions. Each one of my patients can place the hand on the back of the neck as easily as the uninjured member. To my mind this is the ideal way to treat elbow joint fractures and I thank Dr. Doyle for presenting this subject so clearly.

Dr. Le Grand Guerry, Columbia, S. C.

Mr. President, I would like to say a word about this very excellent paper of Dr. Doyle's. It opens up a field of surgery in which we will have to retrace our steps somewhat, I believe, in the near future. The X-Ray is not an unmixed pleasure. It carries along with it a great many advantages and a great many disadvantages, and I realize right now, as I make the statement, that there is a possibility of its being misunderstood, and I hope that no one will gather from my remarks that I do not believe in the X-Ray in the management of fractures. It is one of the best things in recent years in the management of fractures. I would be very loath to give an opinion upon any fractured joint, particularly the elbow-joint, without an X-ray examination; but we have been disposed, under the use of the X-Ray, to lay all of the emphasis of the treatment of the fractures upon the position of the bone. We have gotten to think of nothing but the position of the bone. The position of the soft parts, the muscles and tendons, which must be looked after, and the nerve supply are just as important, and particularly the blood supply; so we have to retrace our steps, and we must not forget that there are other things in the management of fractures that are just as important as the management of the bone. You can have a very faulty position of the

bone with a very poor functional result, and you can have a very poor apposition of bone with a very excellent functional result.

The Doctor began early and had slight movement of the joint, and slight massage. You take any man's arm and put it in a splint and leave it there for six weeks, and it will take six months or a year to do anything with it.

The same with plaster of Paris treatment of fractures. What a tremendous hold that took on us some years ago, when Murphy pointed out the absolute fixation of Plaster of Paris. We began right off to have the greatest number of cases of nonunion that we have ever had before. We got completely away with the absolute fixation; we began to get non-union, because, in the resultant muscular action and the failing blood supply that comes from absolute fixation we began to get conditions necessary to produce a non-union. Before this we did get mal-position of fractures, but non-union was a very unusual thing.

It is a very important subject that Dr. Doyle has brought up.

Dr. F. H. McLeod, Florence, S. C.

In regard to compound fractures of children: We have been practicing in the past few months with the Dakin solution. Since last October we have had the Dakin solution as perfected by Carrel and Dakin in the war zone, and have attained results hitherto unknown in being able to manage a compound comminuted fracture, so that we rely upon iodine. In iodine we had the most valuable aid up to that time, because it sterilized the wound. Sometimes it closed the wounds up, but with Dakin solution it is absolutely non-injurious to the tissues.

As Carrel and Dakin have used it,

with their little tubes of French rubber tubing, in which tiny holes have been made with a shoemaker's punch, with a portion buried in the tissues, in every portion of the wound drained, (no objection to the number you use) are put, and after being cleansed thoroughly with the solution, and the sponge cleansed with it, every part of foreign solution wiped out, and every two hours, night and day, a small amount of this Dakin solution injected by some means into the wound.

Carrel and Dakin report extensive wounds that have shown bacteriologically that they have been sterilized in from six to twelve days. These wounds have closed with primary union. In some instances we have been able to use this solution with most satisfying results. The solution is both antiseptic and germicidal. We have used this in abscesses in general—abscessed appendix, and locally on any manner of wound. The wounds heal. The wounds heal and granulate without pain and without pus formation. I had several cases of osteomyelitis in which we have used this Dakin solution in the bone and in the joint with results hitherto unknown. Pardon this digression from the paper, but the Dakin solution is a most wonderful thing, and has to be kept in a dark bottle, in a dark place.

Dr. J. H. Miller, Cross Hill, S. C.

Some time last October a lady 72

years of age, in going around her home fell from a 12-foot step and fractured the humerus lower third, in which the humerus protruded an inch and a half through the tissues. She was carried in and laid on the bed and I was called in consultation with her attending physician. We cleansed that wound with a 50 per cent solution of alcohol and tincture of iodine. We then flexed the fore arm at right angles, and packed it with Iodizid gauze then covered the whole with dry bandage so as to remove when thought necessary for examination to prevent infection. The doctor attending the case reported no bad effects whatever. We waited five days and it was perfectly set. We then waited five more days, and after using massage gradually, she made an uneventful recovery.

Dr. Doyle Closes.

It is very gratifying to me to hear the reports of Dr. Kirkpatrick, on the same treatment which I have used in these fractures. It is also especially gratifying to me to hear the words of Dr. Guerry, who has such an extensive surgical practice in this State.

As to the Dakin solution, I was pleased to hear from Dr. McLeod on that subject because I have heard many reports from the French battlefields on the subject. I am glad to know of his work on compound fractures with the use of Dakin's Solution.

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SOCIETY REPORTS

The Anderson County Medical Society held its first meeting of the New Year in the Chamber of Commerce rooms Wednesday, January 16. Owing to the inclemency of the weather and the bad condition of the roads only a few members were present.

The new president, Dr. S. C. Dean, presided. After the reading of the minutes of the last meeting several communications were read by the secretary. Letter and circulars from the Tubercular Sanitorium in Columbia was presented. The Society was pleased with the annual report of this institution. It was noted that our county made only a small appropriation toward the support of this Sanitorium and after some discussion on this subject it was decided that the secretary write our senator asking his support and influence toward increasing the amount appropriated for this purpose this year.

The following censors were appointed by the president: Drs. W. F. Ashmore, J. O. Sanders, and J. R. Young.

The Society voted to pay dues of its members who were in the army.

A most interesting letter from Lieut. C. F. Ross to the Society was read by the Secretary. All were glad to hear from Dr. Ross, and to know that he was getting along nicely in his work

at the Base Hospital, at Camp Greene, Charlotte, N. C.

As there was only a small number of members present it was decided that the president's address be postponed until the next meeting.

The first February meeting of the Anderson County Medical Society was held Wednesday, February 6, with a fair attendance.

Letter from our senator was read in which he stated that not only had one county's appropriation to the Tubercular Sanitorium not increased but that the small amount appropriated last year had been discontinued. We were glad to know that our senator was in favor of the increased appropriation.

Dr. Dean gave a most excellent address and as it may be of interest to other Societies in the State it will be sent to the State Journal for publication.

Dr. J. R. Young reported several interesting cases of fractured pelvis, these cases being generally discussed by those present.

Dr. Ashmore, who has charge of the next meeting stated that the subject for consideration would be "Surgical Pathological Conditions of the Gall Bladder," after which the meeting was adjourned.

Olga V. Pruitt, Secretary.

BOOK REVIEW

PHYSICAL DIAGNOSIS by W. D. Rose, M. D., Lecturer on Physical Diagnosis and Associate Professor of Medicine in the Medical Department of the University of Arkansas. Two hundred ninety-four illustrations. St. Louis, C. V. Mosby Company, 1917. Price \$4.00.

It would appear that there is no end to books on Diagnosis and yet there is room for new matter especially along illustrative lines. This book is especially commendable for the excellent plates and the interesting way of teaching the various methods of examination of a patient.

AN INTERMEDIATE TEXTBOOK OF PHYSIOLOGICAL CHEMISTRY WITH EXPERIMENTS by C. J. V. Pettibone, Ph. D., Assistant Professor of Physiological Chemistry, Medical School, University of Minnesota, Minneapolis. St. Louis, C. V. Mosby Company, 1917. Price \$2.50.

The whole subject of Physiological chemistry has been greatly stressed in the past few years. The writer has in this volume brought to the student a practical resume of our knowledge on the subject.

TALKS ON OBSTETRICS by Rae Thornton La Vake, M. D., Instructor in Obstetrics and Gynecology, University of Minnesota; Obstetrician—in-charge of the Out-Patient Obstetric Department of the University of Minnesota; Associate Attending Obstetrician and Gynecologist to the Minneapolis City Hospital; Obstetrician-in-Charge of the Out-Patient Obstetric Department of the Wells Memorial Dispensary; Obstetrician to the Swedish and Abbott Hospitals, Minneapolis; One Time Assistant Resident Obstetrician to the Sloane Hospital for Women in New York. St. Louis, C. V. Mosby Company, 1917. Price \$1.00.

This little book incorporates the gist of both formal and informal lectures to students and is intended to refresh the memory and to bring to the attention of the student and practitioner many practical points lost sight of in the larger text books. It is conservative and thus renders good service in staying the hand of rash or radical treatment in many obstetrical conditions.

MOUTH AND ALLIED STRUCTURES, by Vilray Papin Blair, A. M., M. D., F. A. C. S. Professor of Oral Surgery in the Washington University Dental School, and Associate in Surgery in the Washington University Medical School.

THIRD EDITION—Revised so as to Incorporate the Latest War Data Concerning Gunshot Injuries of the Face and Jaws. Compiled by the Section of Surgery of the Head, Subsection of Plastic and Oral Surgery, Office of the Surgeon-General of the Army, Washington, D. C. With 460 Illustrations, St. Louis, C. V. Mosby Company, 1917. Price \$6.00.

Perhaps no phase of war surgery has developed to the extent of that of surgery and disease of the mouth and jaws unless it be Orthopedic Surgery. The work under review is a very creditable presentation of the whole subject, is authoritative and deserves a place in the library of every physician and surgeon. The chapters on local anesthesia and on general Anesthesia are very good. The bibliography while not exhaustive has been carefully culled.

CLINICAL LECTURES ON INFANT FEEDING—Clinical Lectures on Infant Feeding, by Lewis W. Hill, M. D., Childrens Hospital, Boston and Jesse R. Gerstley, M. D., Michael Reese Hospital, Chicago. 12mo of 377 pages illustrated. Philadelphia and London: W. B. Saunders Company, 1917. Cloth \$2.75 net.

This little book is the outcome of a series of Clinical Lectures delivered before the Medical Profession of North Carolina as a postgraduate course, originating with Dr. W. S. Rankin, Secretary of the Board of Health of North Carolina. This proposition was consummated through the State University jointly with the State Board of Health. We can readily understand after reading the book that the profession of North Carolina received the lecturers enthusiastically.

INFECTION, IMMUNITY AND SPECIFIC THERAPY (Second Edition Thoroughly Revised.)

A PRACTICAL TEXT-BOOK OF INFECTION, IMMUNITY AND SPECIFIC THERAPY with special reference to immunologic technic. By John A. Kolmer, M. D., Dr. P. H., M. Sc., Assistant Professor of Experimental Pathology, University of Pennsylvania, with an introduction by Allen J. Smith, M. D., Professor of Pathology, University of Pennsylvania. Second Edition Thorough-

SURGERY AND DISEASES OF THE MOUTH AND JAWS—A Practical Treatise on the Surgery and Diseases of the

ly Revised. Octavo of 978 pages with 147 original illustrations, 46 in colors. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$7.00 net, Half Morocco, \$8.50.

Perhaps in these war times the whole subject of Infection, Immunity and Specific Therapy is being emphasized more than ever before in the history of the world. Ordinarily this subject has not been dignified to the position of a text book, but this volume is intended as such and apparently will succeed.

THE SPLEEN AND ANAEMIA. EXPERIMENTAL AND CLINICAL STUDIES by Richard Mills Pearce, M. D., Sc. D., Professor of Research Medicine, with the assistance of Edward Bell Krumbhaar, M. D., Sc. D., Professor of Clinical Surgery, University of Pennsylvania. 16 Illustrations, Color and Black and White. Philadelphia and London, J. B. Lippincott Company. Price \$5.00.

An immense amount of research work has been done on the spleen in the last decade, undoubtedly as a result we have made marked advances along this line. This book is an exhaustive study of the whole subject and we especially commend the bibliography which is far more complete than is found in the average book.

BLOOD TRANSFUSION HEMORRHAGE AND THE ANAEMIAS by Bertram M. Bernheim, A. B., M. D., F. A. C. G., Instructor in Clinical Surgery, the Johns Hopkins University Captain, Medical Officers Reserve Corps, U. S. A., Author of "Surgery of The Vascular System," etc. Philadelphia and London, J. B. Lippincott Company. Price \$4.00. The present volume is the outgrowth of a chapter on Blood Transfusion written in 1913 as a monograph. The author gives credit to Crile for having published and epoch making book in 1909 thus stimulating the author to further research. The author is Instructor in Clinical Surgery at Johns Hopkins University and now a Captain in the Medical Officers Reserve Corps in France.

THE THIRD GREAT PLAGUE—The Third Great Plague, a discussion of Syphilis for Everyday People. By John H. Stokes, A. B., M. D., Chief of the Section of Dermatology and Syphilology, The Mayo Clinic, Rochester, Minnesota. 12mo of 204 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$1.50 net.

So protean a disease as syphilis gives an unusually wide range to investigators and writers. The last word will probably

never be said on the subject. The writer here presents his views in an interesting way. We commend the book especially as an academic discussion of the subject.

AMERICAN ADDRESSES ON WAR SURGERY—American Addresses on War Surgery. By Sir Berkeley Moynihan, C. B., Temporary Colonel, A. M. S., consulting Surgeon, Northern Command. 12mo of 143 pages. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$1.75 net.

The American profession has long considered the author of this little book a master surgeon and has looked to him for guidance along many lines. These addresses were delivered in this Country before various organizations and form an interesting chapter in war surgery.

INFANT FEEDING. (Third Edition.) By Clifford G. Grulée, A. M., M. D., Assistant Professor of Pediatrics at Rush Medical College; Attending Pediatrician to Presbyterian Hospital Chicago. Third Edition Thoroughly Revised. Octavo of 326 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$3.25 net.

The author claims that while the European war has almost completely stopped scientific work abroad the advance of scientific medicine which has been especially noticeable in pediatrics in this country has materially added to our knowledge in chemistry of the infant's metabolism and to that of metabolism in general.

The author has endeavored to incorporate in this revision whatever scientific and practical facts have come to his notice. He maintains that the most successful fight against Infant Mortality will be made by educating the mothers in the essential facts of the science of the nourishment of the infant.

MATERIA MEDICA, PHARMACOLOGY, THERAPEUTICS AND PRESCRIPTION WRITING. (Second Edition, Reset). Materia Medica, Pharmacology, Therapeutics and Prescription Writing. For Students and Practitioners. By Walter A. Bastedo, Ph. G., M. D., Assistant Professor of Clinical Medicine Columbia University. Second Edition, Reset. Octavo of 654 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1918. Cloth \$4.00 net.

This is a 1918 book and has been thoroughly revised throughout. We note that the author is Assistant Professor of Clinical Medicine, Columbia University, New York, therefore, his position should give him a wide range of therapeutic ap-

plication and thus he should be able to harmonize the therapeutic and the practical in a satisfactory manner.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE. (Thirteenth Edition Thoroughly Revised.) By James M. Anders, M. D., Ph. D., LL. D., Professor of Medicine and Clinical Medicine, Medico-Chirurgical College Graduate School, University of Pennsylvania, Thirteenth Edition Thoroughly Revised with the Assistance of John H. Musser, Jr., M. D., Associate in Medicine, University of Pennsylvania. Octavo of 1259 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

This is the thirteenth edition of perhaps the most popular text book on the practice of medicine published at the present time. The revision has been thorough and will be received by the profession gratefully. Much matter has been added, for instance on Treatment of Tetanus, Acidosis, Asthma, Estimation of Renal Function, Pneumococcal Infections, Focal Sepsis, etc.

AMERICAN ILLUSTRATED MEDICAL DICTIONARY (DORLAND). New 9th Edition Revised and Enlarged. A new and complete Dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Veterinary Science, Nursing, Biology, and kindred branches; with new and elaborate tables. Ninth Edition Revised and Enlarged. Edited by W. A. Newman Dorland, M. D. Large octavo of 1179 pages with 331 illustrations, 119 in colors. Containing over 2,000 new terms. Philadelphia and London: W. B. Saunders Company, 1917. Flexible Leather, \$5.00 net; thumb index, \$5.50 net.

The rapid advance of medical science necessitates frequent revision of the medical dictionary and Dorland now presents the best all round dictionary published. This is the ninth edition. In the past two years many new words have appeared in every department. This is especially true in war medicine and surgery. Perhaps there never has been a time when an up to date dictionary would be more welcome.

ABSTRACTS

HOOKWORM DISEASE.

An elaborate paper based on the work of the Rockefeller Foundation in the Malay Peninsula, Java and Fiji Archipelago, covering two and one half years, is published in The Journal A. M. A., Feb. 23, 1918, by S. T. Darling, M. A. Barber, and H. P. Haeker, New York. The principal point is the comparative merits of oil of chenopodium and thymol in the treatment of the disease. Their methods of obtaining, counting and classifying the worms, and the relative efficiency of various drugs in expelling them and methods of preparation of the patients and administration of the treatment are given in considerable detail, and they find that oil of chenopodium is by far the most efficient. What they call the half maximum dose (0.5 c.c. three times, or 1.5 c.c.) of oil of chenopodium is the

preferable routine treatment. It does not have the toxic effects of the full dose, and two treatments have the very satisfactory result of removing 99 per cent. of the worms present. It has the additional advantage of more uniform action, and is less unpleasant to the taste than thymol. Thymol has an advantage over this half dose of oil of chenopodium, in that the 90 grain dosage produces a better result when single treatments are compared. This disappears, however, when two half doses of oil of chenopodium are used, and a dose of 90 grains used indiscriminately would lead to serious results.

BALANTIDIUM COLI.

A. D. Young and O. J. Walker, Oklahoma City (Journal A. M. A., Feb. 23, 1918), report a case of balanti-

dium coli infection in a resident of Oklahoma, and a native of Kansas, in which state he had lived a greater part of his life. He had been employed as a laborer, and reported that he remembered no previous serious illness. He was much reduced physically, having suffered from bloody stools and tenesmus, with intermissions, and lost during that time about 40 pounds in weight. He had been employed in keeping hogs and also as a "gut stripper" in a local packing plant. His stools contained an abundance of the balantidium, which is described by the authors in their comments. The case is reported as of interest because it is, so far as they know, the first that has occurred in Oklahoma.

CIRCULATORY FAILURE.

C. J. Wiggers, New York (Journal A. M. A., Feb. 23, 1918), has studied circulatory failure as an element or accompaniment of so-called shock. To this end the blood pressure changes occurring in the auricles, ventricles, pulmonary circulation and systemic arteries were studied under light ether anesthesia in naturally breathing animals, in which various forms of circulatory failure were induced. The methods and instruments used, and the types of circulatory failure studied are described. The latter include circulatory failure, due to exposure of the intestine, hemorrhage, the prolonged use of nitrites, acute cardiac failure and the intravenous injection of oil with consequent fat emboli. The practical significance of the results in the diagnosis and the early recognition of shock, are emphasized, as well as the general principles of treatment. Experimental work shows that circulatory failure is introduced by a reduced peripheral resistance, but the condition

does not become serious until the venous pressure falls. The treatment must be directed, first, to overcome the reduced resistance, and second, to replenish the deficient venous return. For the former purpose, vasocostricitor drugs, such as epinephrin, have been suggested, using various routes of application. The second indication—replenishing the venous return—has been recommended to be done by intravenous infusions of physiologic sodium chlorid solution, admixed with gum acacia or graded intravenous infusion of glucose solutions. The breathing of carbon dioxid mixtures has also been recommended, as acting chemically or by augmenting respiration, favoring the return of blood to the heart. While these are based on sound general principles, they can be of little value so long as venous pressure is high, and the reduction of this pressure by bleeding would seem to be more reasonable. If circulatory failure was due to fat emboli, further increase of venous pressure by any method is distinctly contraindicated. For these therapeutic reasons alone, the importance of differentiation of circulatory failure, such as is found in surgical shock from other forms, cannot be too strongly emphasized.

HIGH BOWEL OBSTRUCTION.

A case of high bowel obstruction ending fatally is reported by R. A. Keilty, Philadelphia, (Journal A. M. A., Feb. 23, 1918). The necropsy showed that a small adenoma of the jejunum had acted as a starting point for intussusception, causing a high obstruction and changes in the intestinal wall. These changes produced an extreme toxemia, ending in terminal hypostatic pneumonia. High obstruction of the small intestine is known to produce a potent

toxin, which has been isolated, as illustrated in the case described by the writer.

PNEUMOCOCCUS TYPE DETERMINATION.

A rapid and simple method of determination of the different types of the pneumococcus is described by Charles Krumweide, Jr., and Eugenia Valentine (Journal A. M. A., Feb. 23, 1918). It was the result of the observation that a boiling alkaline hypochlorite solution does not destroy the precipitable substance of bacteria, from which they developed the preparation of a concentrated precipitin antigen from pneumonia sputum. In an appreciable proportion of specimens, the type of pneumococcus present could be identified by this method in from one-half to one hour after the receipt of the sputum. One of the steps in the hypochlorite method involved the removal of the coagulable albumins. They had noticed that the specimens yielding positive results were usually very rich in coagulable albumins, as might be expected in an inflammatory exudate of pulmonary origin. In fact, the presence of albumin has been used for diagnostic purposes, especially for the examination of sputums in tuberculosis tests. A trial showed that sputum, actually raised from the lung, coagulated more or less firmly when heated to 100 C., and on this basis they devised their method, which is given in quite full detail, and the results are shown in tabulated form. The quality of the sputum is noted, and also the degree of coagulation. The results with the sand method of Mitchell and Muns are also given when sufficient sputum is available, and a few examinations by the Avery method, which can be employed as a check method, even though the tubes are inoculated too late to be

examined the same day; but caution is suggested as the possible disturbing influence of overgrowth by other organisms after a longer incubation than five hours. Sterile citrated horse blood was used in place of defibrinated rabbit blood. The layer method was not used with the Avery method, as the broth does not layer well. They have obtained in their series somewhat better results with the coagulation method than with the sand method. The advantages of the quick determination of type, enabling one to supply the messenger with the appropriate serum, and the gains of the patient from its early use, need, they say, very little comment.

HEMORRHAGE OF THE NEW-BORN.

Oscar Berghausen, Cincinnati (Journal A. M. A., Feb. 23, 1918), reports a case of hemorrhagic disease in the new-born, resistant to other treatment, which was promptly cured by the injection of citrated blood into the superior longitudinal sinus. Previous attempts at transfusion into a vein had failed, and the longitudinal sinus was chosen only as the last resort. About 150 to 250 c.c. of paternal citrated blood were injected into the sinus. The effects were immediate. A pale and apparently lifeless infant was transformed into a rosy, crying baby, the change beginning before the operation was complete.

TUBERCULOSIS.

The value of the roentgen ray in the diagnosis of pulmonary tuberculosis in war time, is emphasized by Lawrason Brown, Saranac Lake, N. Y. (Journal A. M. A., Feb. 23, 1918). He shows that, notwithstanding the roughness of examination the dependence on symptoms and previous history is hardly

sufficient, the medical profession is, therefore, thrown back on objective findings to exclude pulmonary tuberculosis from the Army. Medical examiners, he says, doing such work may grow stale, for it is hard sometimes to get the full cooperation of the patient in certain significant tests. He asks what data we have of roentgenographic studies of recruits. He has been able to find but one study, and that only on fifty physicians and medical students, and he does not speak with confidence in regard to this one. The disadvantages of using only flat plates, or at least their relative merits as compared with stereoscopic plates are noticed, and the fluoroscope, he says, is too uncertain of interpretation to be suitable for this work. The study of 100 men of the New York National Guard is discussed, and also that of a later study of 1,000 men of the same organization. The disadvantage of passing men for military service, who will only serve to swell the pension rolls is remarked. In support of his plea for the use of the roentgen ray in the examination of candidates for service, he summarizes the reasons. They are: 1. To accept men with acute and non-important bronchitis whose physical signs may simulate those of pulmonary tuberculosis. 2. To reject men with advanced pulmonary tuberculosis whose physical signs suggest a slight lesion. 3. To verify the presence of lesions indicated by physical signs. 4. To detect deepseated acute or subacute pulmonary tuberculosis when only indefinite physical signs exist. 5. To reveal various nontuberculous pulmonary diseases in early stages. 6. To detect and verify cardiac, arterial and osseous changes. 7. To reveal old basal pleurisies. 8. To establish a permanent record for each soldier.

PERSONALITY IN PARESIS.

Michael Osnato, New York (Journal A. M. A., Feb. 16, 1918) has studied the development of paresis in special types of psychotic patients and gives the results. A large number of paretics, he thinks, run the course of the disease without at any time coming within the average layman's concept of insanity. They seem to suffer mainly from the physical results of the destructive disease process within the cranium. On the other hand, a large group of paretics are peculiar, irritable, euphoric inefficient, boisterous, lewd, and subject to delusions or hallucinations. These patients are, according to the nonmedical conception, affected with the psychosis of paresis. The writer's thesis is that the personality or so-called original make-up of the patient is the cause of this difference. It is not true, he says, that paresis occurs only in energetic, mentally active persons and is rare in the dull, weak minded and inefficient. In support of his views, he reports twelve cases from his private practice to show that the patient's original personality has much to do with the development and form of the disease. He declares that, given the presence of a syphilitic infection, caused by a specific nervous strain of spirochetes, in two persons under the same conditions, it is always possible that the character of their mental reactions may differ widely.

PROSTATECTOMY.

F. M. Denslow, Kansas City, Mo. (Journal A. M. A., Feb. 16, 1918), reports that he recently had to operate in five cases, in which suprapubic prostatectomy had been performed before, but gradual recurrence of obstruction had taken place. In all the cases, prostatic hypertrophy had been completely removed and no further tissue had to be taken away. It is far from

being universally known at present, that the term "prostatectomy" is a misnomer. The gland itself is crowded to the periphery and becomes the surgical capsule of the tumor that is formed. In the five cases under discussion, the hypertrophy had been removed without wounding the sphincter, which regained its tone and formed an obstruction to the urine evacuation. The cavity below is frequently so large that a small, beaked sound can be rotated within it. That this result is not attained more often is due to a fortunate unintentional wounding of the sphincter, and the way to prevent this inconvenient sequel of prostatectomy is intentionally to divide the sphincter, preferably its lower margin. The division of the sphincter is also the remedy for the recurrence at secondary operation, which should be followed by systematic dilatation of the bladder neck, for at least a year, at first weekly, then, semimonthly and monthly.

LIPOVACCINES.

In a preliminary note E. R. Whitmore, Washington, D. C.; E. A. Fennel, Cincinnati, and W. F. Peterson, Chicago (Journal A. M. A., February 16, 1918), argue for the advantages of the use of lipovaccines in prophylactic work. They claim the following: (a) The diminution of both the local and systemic reaction; (b) the feasibility of giving sufficient vaccine at a single injection to properly immunize the individual; (c) the persistence in the individual of a focus from which the immunization proceeds over a period of several months, with the resulting lengthening of the period of immunity; (d) the actual detoxicating effects of certain lipoids that can be incorporated in the vaccine and (e) the prevention of autolysis and deterioration of the vaccine. Each of these

points is dilated on in the text. They have prepared a series of vaccines in the Army Medical School laboratory for immunization against typhoid-paratyphoid, pneumococcus types I, II and III, meningococcus types No. 1, 10, 30 and 60, dysentery, Shiga Flexner, and Y. The method of preparation is described with the selections of the oils as the medium, and the detailed results of the various types used, also the methods of preservation and administration. The impression that they have gained from their work is that the lipovaccine has a number of advantages. While of course it is more expensive and difficult to prepare than aqueous solutions and a number of technical problems remain to be solved, apart from the typhoparatyphoid A and B preparations, the pneumococcus and meningococcus vaccines have been of interest on account of the apparently ready response in agglutinins in both animals and men. Protection tests in animals vaccinated with the typhoid lipovaccine, have indicated the development of a certain resistance, as did the experiments with mice with pneumococcus vaccine also. Their results so far, however they admit, are not sufficiently advanced to permit definite conclusions to be drawn.

CONDYLOMA OF THE BLADDER.

R. H. Baker, Ann Arbor, Mich. (Journal A. M. A., Feb. 16, 1918), reports a case, which, for want of better classification, he describes as a condyloma of the bladder, in a married woman aged 30. Shortly after her marriage, six years before, she had suffered from an attack of gonorrhea, with subsequent bladder irritations, lasting a long time. The writer cautions against diagnosis without microscopic examination in similar cases of bladder growth, as long continued chronic irritation may cause the forma-

tion of warty growths, which at times resemble cancer. The patient ascribed her troubles to the astringent bladder irrigations given for her symptoms. There was no history or evidence of syphilis.

BILHARZIAISIS.

F. G. Cawston, Potechefstroom, Transvaal (Journal A. M. A., Feb. 16, 1918), describes the disease bilharzaisis as it occurs in certain parts of South Africa, where it is especially prevalent among the school children in the low veldt, in some places affecting 80 per cent. of the boys and about 10 per cent. of the girls. Some persons have no other symptoms than that of bloody urine, generally of long duration. In the severer cases, it is accompanied by pains in the back and the urinary organs, and anemia and general malaise are strikingly prominent. Severe exacerbations sometimes occur. For many years the disease has been attributed to bathing in infected waters, but its causal organism was not known, until Dr. E. Warren found the cercaria developing in a common fresh water snail, *Physopsis africana*. This organism, which Dr. Cawston has found by experiments with hundreds of specimens, is its only animal carrier. He has found this in about 10 per cent. of the specimens examined. Thus far, it has not been determined just how the cercaria enters the human body, but observations of allied organisms in Japan and in Venezuela leave little doubt as to the fact that it may penetrate the skin or mucous membrane of any one bathing, or even wading, in the infected waters. Among the drugs that have been advocated as remedies, hexamethylenamin is probably the most effective. The writer prefers to use it in combination with buchu. Sodium salicylate has also been used with some good

results. The urine of a bilharzia patient usually contains a considerable amount of blood and some mucus. The spiny ova of the organism vary in size, but in Natal and the Transvaal they average about 0.15 mm. in length and 0.0625 mm. in breadth. Their vitality in fresh water is low and it is hard to procure satisfactory microscopic preparations. The writer's observations agree with those of others from different parts of the world. For our knowledge of the subject, we are primarily indebted to the brilliant work of the Japanese investigators.

VASO-EPIDIDYMOSTOMY.

V. D. Lespinasse, Chicago (Journal A. M. A., Feb. 16, 1918), says that obstructive sterility in the male is readily diagnosed by microscopic examination of the semen, which shows a complete absence of spermatoza. The only treatment is by surgery. The particular operation necessary to be performed depends on the location of the obstruction. If it is in the epididymis, the operation will be direct vasoperididymostomy. If it is in the scrotal vas, there must be resection of the obstruction and reunion of the vas. If it is in the pelvic vas or ejaculatory duct, the writer's sae operation should be used. If it is in the pelvic vas on one side, and the epididymis or scrotal vas on the other side, anastomosis must be done. There may also be combinations of any of the foregoing conditions. Diagnosis of the location of the obstruction is made at the time of operation, by injecting a colored salt solution into the central end of the opened vas and noting its appearance or non-appearance in the urethra. All the present operations to join the vas to the epididymis tubule are indirect. The two chief causes of failure are the overgrowth of connective tissue, chok-

ing the epididymis tubule, and the organizing of the blood clot, whereby, it is closed. To meet these difficulties, the writer has devised a special operation for direct anastomosis between the epididymis tubule and the lumen of the vas, which he calls direct vaso-epididymostomy. It brings the epithelium of the vas into direct union with the epithelial lining of the tubule, absolutely eliminating the danger of hemorrhage, and also practically that of choking by connective tissue. The technic of the operation is described in detail, with eleven illustrations showing the steps and the completed anastomosis. Usually the lumen is found empty, but it is occasionally filled with impacted spermatoza, and in cases of longstanding, with amorphous material. One case is briefly reported.

TYPES OF PNEUMOCOCCI INFECTION.

W. T. Vaughan, Ann Arbor, Mich. (Journal A. M. A., Feb. 16, 1918), describes in detail the Avery method for determining the type of pneumococci germs, as used in the United States Army. The tubes need not be absolutely sterile, though that is desirable, but it is not any special additional trouble to insure sterility of the tubes, when using dry heat for the purpose of sterilizing a part of the pipets. Certain points require special emphasis. First and foremost, the sputum used must come from the chest and must not be contaminated with saliva. It must be emphasized also, that a report for Type IV pneumococci infection is a negative report. In regard to the dilution of serums used, it must first be said that Types I, II and III may be used undiluted. This is especially true in Type I serum. Dilution should be made in sterile physio-

logic sodium chlorid solution, and should be kept cold. If the infection should be with the streptococci, instead of the pneumococci, it will be found in the smear from the six-hour culture with uncontaminated sputum. If possible, the determination of pneumococci type by this rapid method should be controlled by agglutination reactions on pure cultures of the organisms. A blood culture should be made in every pneumonia case, soon after the patient's entrance into the hospital, and if pneumococci growth is obtained, an agglutination test should also be made. If time permits, further identification tests should be made on the pure culture.

PRIMITIVE SURGERY.

Primitive Surgery in the western hemisphere is the subject chosen by Leonard Freeman, Denver (Journal A. M. A., Feb. 16, 1918), for his presidential address before the Western Surgical Association at Omaha, December 14. He points out that the treatment of disease among the earlier inhabitants of this continent was not so much humbug in all respects as we are likely to think. He declares that their ideas of disease were just as near to the recognition of bacteria as was possible without knowing anything about them, and the medicine-man, while dealing extensively in the occult, had a firm belief in himself and his methods. The surgical treatment covered a large range, from trephining, to amputations, and even a knowledge of certain methods of anesthesia was undoubtedly possessed by some of the primitive people. Also, the strong hypnotic influence exercised by the medicine-man must have had its effect on his patients. The article is readable and is well illustrated.

INCREASED RANK AND MORE AUTHORITY FOR MEDICAL OFFICERS.

As most of our readers are aware, an amendment was introduced into Congress at the recent session which, if it had been adopted, would have given the medical officers in the Army the same rank that prevails in the Medical Corps of the Navy. Specifically the amendment provided that there should be twenty-five one-hundredths of 1 per cent. of major-generals, the same proportion of brigadier-generals, 4 per cent. of colonels, 8 per cent. of lieutenant-colonels, 23.5 per cent. of majors, 32 per cent. of captains, and 32 per cent. of lieutenants, this to apply to both the regular and the reserve corps men. Thus, if there are 10,000 medical officers in active service, there might be 25 major-generals, 25 brigadier-generals, 400 colonels, 800 lieutenant-colonels, 2,350 majors, 3,200 captains and 3,200 first lieutenants. This amendment lapsed without action by the ending of the session. The substance of the amendment, however, will be incorporated in a bill which will be introduced in both the Senate and the House at the coming session of Congress.

Medical officers must be equal in rank and authority with line officers if they are adequately to carry out the duties for which they will be held responsible. This fact has been emphasized by the experience of our allies in the present war, as well as by our own experience in the past. Our allies admit that in the beginning the medical officer did not have the rank, and consequently the authority, he should have had and that, for this reason, there have been grievous consequences. Among these was the disastrous experience of the British Army in the Mesopotamian campaign as a result of

the failure of the medical service. The report of this tragedy, made by a board of nonmedical men, showed that lack of authority of the medical officers was an important factor. The medical officers were practically ignored. They were not advised as to the character of the expedition that was being undertaken, and as a consequence, they were unprepared for what happened. When later a medical officer made urgent representations in regard to the actual conditions obtaining, which in his opinion needed prompt action, he was threatened with arrest and removal from his post. When the actual results came the blame was thrown on the medical department, of which this medical officer was a member. The medical officers were censured because they had not protested more vigorously. We had a similar experience in 1898 when our medical officers were criticized for insanitary conditions at Chickamauga and elsewhere, although there was plenty of evidence to show that they had protested against these conditions to line officers. The whole sad story is told in detail in the Dodge report. There, also, will be found testimony that line officers treated with contempt the recommendations and protests made by medical officers. The medical officer is without influence simply because his shoulder straps indicate lower rank than that of the line officer with whom he is associated. Some may sneer, but the fact remains that it is rank that counts in both the Army and the Navy.

Of course rank brings with it increased pay. This, however, is immaterial. At the same time, it should not be forgotten that most of the physicians now in the Medical Reserve Corps have not only left the comforts of their homes, but also have given up practices which in the majority of in-

stanees yielded far more income than the pay they would receive as medical officers of the Army even if they had conferred on them the highest rank that the proposed law would provide. Among these medical reserve officers are many of the most prominent men in our profession, including the leading men in the specialties, as well as our best surgeons and internists.

When the war broke out there were less than 450 medical officers in the regular Army Medical Corps. Today there are commissioned, including officers of the regular Army, the National Guard and the Medical Reserve Corps, at least 17,000 physicians. Less than 1,000 are in the regular Army Medical Corps. Under the present law these regular Medical Corps officers are entitled to the grades of lieutenant-colonel and colonel; and in the case of the surgeon-general, to that of brigadier-general; the highest rank that can be conferred on any one of the other 16,000—that is, on any reserve medical officer—is that of major.

May we remind our readers that the men in active service will be prevented by the regulations from using their influence in this matter, and that the duty of pushing this measure rests on those who stay at home? Every physician has representing him in Congress one man in the House of Representatives and another in the Senate. If every physician will let his representative know that this proposed measure should become a law, and if in addition he will enlighten his neighbors in regard to the matter, an effective public opinion will be created. The time is opportune; congressmen are at their homes. Write or speak to your representatives now; get your neighbors to do likewise—not for the good of the medical profession, but for the good of the service.—Editorial, The Journal A. M. A., Nov. 10, 1917.

THE EFFECT OF RANK ON THE DUTIES AND RESPONSIBILITIES OF THE MEDICAL OFFICERS.

The importance of the medical officer in the armies engaged in war, as indicated by the rank and authority given him, is less highly esteemed in this country than in any other, including both our allies and our enemies. Medicine has accomplished great triumphs in the armies of Europe. Under unprecedentedly difficult conditions, sanitation has been so ably maintained that both morbidity and mortality from the infectious diseases are less today in the military than in the civilian population of the warring nations. In the British Army, 80 per cent. of the wounded have been returned to duty. The number of hospitals in France reaches into the hundreds, and for the most part their equipment is excellent. Scientific laboratories are carrying on practical research investigations. Chemists are finding antidotes for the multitudinous poisonous gases turned on by the Germans, and are discovering new compounds to be used offensively. Within twenty-four hours after the first discharge of chlorin by the Germans, not only had the nature of the gas been determined and an antidote found, but protective masks were being made; and within ten days the Germans were being treated with the more deadly phosgen. Indeed, scientific studies made at the front saved the armies of Great Britain and France from complete annihilation. Rehabilitation hospitals in which the badly injured are supplied with artificial limbs and other devices are working successfully and converting the apparently hopelessly maimed into productive, self-supporting citizens. In fact, these institutions constitute one of the great triumphs of military

and conservative medicine. Every wounded and sick soldier can be instantly located and his condition reported to his friends. In this way the discontent arising from anxious waiting for news is avoided. There has been no breakdown in the medical service in the great armies of Europe, as has been the case so often in the past and with us in 1898. When a son is killed in battle, parents seek and find consolation in the proud knowledge that he has died fighting for his home and his country; but when he is wounded or sick and dies from neglect, there is no consolation, and in the most patriotic soul a bitterness against those in authority develops.

All this and much more might be said concerning the efficiency of the medical service of our chief allies. What is the explanation of its efficiency? The answer is that the medical officer is given support backed by rank and authority. A line officer in the British Army hesitates a long while before he rejects the advice of his medical colleague, because that colleague has rank and authority commensurate in some degree at least with his own, and is recognized as his superior in the special line of work. Compare this with the record of the congressional inquiry into the conduct of the War Department in the war with Spain, when, according to his own testimony, the commanding officer at Chickamauga in 1898 ostentatiously drank from a well condemned by his medical officer, while his hospitals were filled with typhoid fever patients. We have gone into this war with the medical officer invested with no more authority than he had in 1898. Is it unreasonable to ask if we are to repeat the ex-

periences of that time? However, we are told that the line officer of today is much wiser than his predecessor of twenty years ago, and since he makes this statement himself, we must give it credence. We certainly hope that it is true. It is the duty of the medical profession to protest against this condition. The medical men of this country are not slackers, as is shown by the fact that more than one seventh of their total number have voluntarily offered their services to their country, notwithstanding the failure of those in authority to give the reasonable recognition asked. We have asked for increased authority, and in the Army this can be secured only by high rank, because when a medical man goes into the service the government puts its stamp on him just as it does on the coin of the realm; and 30 cents will not buy a dollar's worth of anything. So far the protest has fallen on deaf ears.

Medical men will play the game and do their duty, whatever may be the verdict in this matter; but it should be clearly understood that they are going into the game under a heavy handicap. They will do the best they can; but if discontent should arise from poor or poorly prepared rations, if respiratory diseases prevail as the result of overcrowding, if pneumonia becomes overcrowding, if pneumonia becomes widespread because barracks are not heated and soldiers are not warmly clothed and amply provided with blankets—if all these things happen, the medical officer will continue to do the best he can under the conditions, but he will not be responsible for the conditions.—Editorial, *The Journal A. M. A.*, Nov. 24, 1917.

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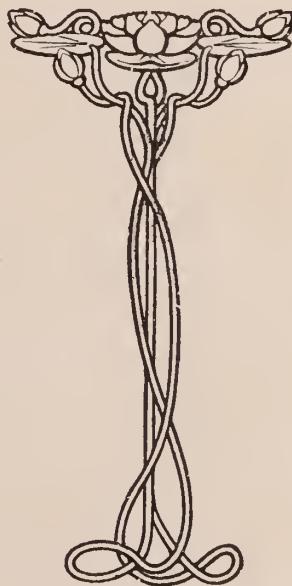
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Buffalo, N. Y.

Official Program
of the
Seventieth Annual Meeting
of the
South Carolina Medical Association



To be held at
AIKEN, SOUTH CAROLINA
April 16, 17, 18, 1918

OFFICERS.

F. H. McLeod—President, Florence.
 Kenneth M. Ynneh—First Vice-President, Charleston.
 L. Rosa H. Gantt—Second Vice President, Spartanburg.
 P. G. Ellesor—Third Vice President, Spartanburg.
 E. A. Hines—Secretary-Treasurer, Seneca.

COUNCILORS.

First District—A. E. Baker, Charleston.
 Second District—J. S. Matthews, Denmark.
 Third District—T. L. W. Bailey, Clinton.
 Fourth District—R. R. Berry, Union.
 Fifth District—M. J. Walker, Yorkville.
 Sixth District—W. S. Lynch, Scranton.
 Seventh District—S. C. Baker, Chairman, Sumter, (Deceased.)
 Eighth District—W. P. Timmerman, Batesburg.

COMMITTEE ON ENTERTAINMENT

Harry H. Wyman, Aiken, Chairman.
 H. T. Hall, Aiken.
 T. W. Hutson, Aiken.

COMMITTEES.

On Revision Medical Practice Act.
 A. E. Boozer, Chairman, Columbia, S. C.
 C. F. Williams, Columbia, S. C.
 J. S. Matthews, Denmark, S. C.

On Public Policy and Legislation.
 Julius H. Taylor, Chairman, Columbia, S. C.
 L. A. Riser, Columbia, S. C.

N. B. Heyward, Columbia, S. C.

On Prevention of Venereal Diseases.

E. C. Baynard, Chairman, Charleston, S. C.
 N. B. Edgerton, Columbia, S. C.
 C. A. Mobley, Rock Hill, S. C.

On Necrology.

D. L. Smith, Chairman, Spartanburg, S. C.
 Olga Pruitt, Anderson, S. C.
 W. F. R. Phillips, Med. College, Charleston, S. C.

On Scientific Work.

R. S. Cathcart, Chairman, Charleston, S. C.
 F. A. Coward, Columbia, S. C.
 H. R. Black, Spartanburg, S. C.

On Hospital Standardization and Efficiency.

Robert Wilson, Jr., Chairman, Charleston, S. C.
 S. C. Baker, Sumter, S. C.
 E. A. Hines, Seneca, S. C.
 J. R. Young, Anderson, S. C.
 J. La Bruce Ward, Columbia, S. C.

Study and Prevention of Tuberculosis.

Ernest Cooper, Chairman, Columbia, S. C.
 J. C. Harper, Greenwood, S. C.
 W. R. Barron, Columbia, S. C.

On Public Instruction and Health.

William Weston, Chairman, Columbia, S. C.
 L. Rosa H. Gantt, Spartanburg, S. C.
 G. Mae F. Mood, Charleston, S. C.

On Social Insurance.

A. E. Boozer, Chairman, Columbia, S. C.
 C. F. Ross, Anderson, S. C.
 J. G. McMaster, Florence, S. C.



WHITNEY PROPERTY: Winter Residence of Harry Payne Whitney.

On Sims' Memorial.

S. C. Baker, Chairman, (Deceased)
Columbia, S. C.
C. W. Kollock, Charleston, S. C.
E. A. Hines, Seneca, S. C.

On Medical Education.

J. Heyward Gibbes, Chairman, Columbia, S. C.
Elbert Pelham, Newberry, S. C.
Robert Wilson, Jr., Charleston, S. C.
W. W. Fennell, Rock Hill, S. C.
Jess Bell, Due West, S. C.
A. M. Redfern, Clemson College, S. C.
L. O. Mauldin, Greenville, S. C.
D. B. Lyles, Spartanburg, S. C.
C. F. Ross, Anderson, S. C.
T. L. W. Bailey, Clinton, S. C.

PROGRAM—HOUSE OF DELEGATES.

General Order Will Be As Follows:
Called to order by the President at 10:00 A. M. Highland Park Hotel, Tuesday, April 16th, 1918.

Appointment of Committee on Credentials and report of same.

Report of Secretary-Treasurer.
Report of Scientific Committee.
Report of Committee on Public Policy and Legislation.

Report of State Board of Health.
Report of Committee on Health and Public Instruction.

Report of Committee on Study and Prevention of Tuberculosis.

Report of State Board of Medical Examiners.

Report of Councilors:
Report of Chairman, S. C. Baker, (Deceased.)

First District, A. E. Baker.
Second District, J. S. Matthews.
Third District, T. L. W. Bailey.
Fourth District, R. R. Berry.

Fifth District, M. J. Walker.

Sixth District, W. S. Lynch.

Seventh District, S. C. Baker, (Deceased).

Eighth District, W. P. Timmerman.

Report of Delegate to American Medical Association:

Report of Sims' Memorial Committee.

Report of Committee on Prevention of Venereal Diseases.

Report of Committee on Health Insurance.

Report of Committee on Efficiency and Standardization of Hospitals.

Introduction of New Business.

Miscellaneous Business.

Election of officers, fixing time and place of next annual meeting.

OFFICIAL PROGRAM.

Scientific Session, Thestone Theatre, Wednesday, April 17, 1918, Morning Session 10:30 A. M.

Called to order by President, F. H. McLeod.

Divine Invocation, by Rev. John Ridout.

Address of Welcome, Mayor of the City.

Address of Welcome, Dr. T. W. Hutton, President Aiken County Medical Society.

Response, by President F. H. McLeod.

Report of Entertainment Committee, Dr. Harry H. Wyman, Chairman.

Presidents Address.

Symposium On Military Medical and Surgery.

Address: Gastro-Intestinal Diseases in the Army, Major Seale Harris, Surgeon Generals Office, U. S. Army, Washington, D. C.

1. The Early Diagnosis and Treatment of Cerebro-Spinal Meningitis.



MON REPOS: The Winter Residence of Major Thomas Hitchcock.

Major Herrick, Camp Jackson, Columbia, S. C.

2. Epidemiology of Epidemic Cerebro-Spinal Meningitis, Dr. James A. Hayne, State Health Officer, Columbia, S. C.

3. The Work of the Medical Advisory Board in the Draft, Dr. Kenneth M. Lynch, Member Medical Advisory Board, Charleston, S. C.

4. The Treatment of Venereal Diseases in the Army as carried out at the Base Hospital, Camp Greene, Charlotte, N. C.; Captain Clyde F. Ross, Camp Greene, Charlotte, N. C.

5. The Application of Military Sanitation in Small Towns and Rural Districts, Major F. L. Parker, Charleston, S. C.

Abnormal Obstetrics, Dr. G. Fraser Wilson, Charleston, S. C.

A Case of Ectopic Pregnancy with Appendicitis, Dr. C. B. Epps, Sumter, S. C.

The Diagnosis and Treatment of Appendicitis Complimenting Pregnancy, Dr. George H. Bunn, Columbia, S. C.

Heat in the Treatment of Inoperable Cancer, Dr. W. W. Fennell, Rock Hill, S. C.

Acute Perforations in the Abdomen—Spontaneous and Traumatic—with Report of Cases, Dr. A. E. Baker, Charleston, S. C.

Urinary Calculi—Diagnosis and Treatment, (Illustrated), Dr. E. C. Baynard, Charleston, S. C.

My Experience with the Use of Mercuric Intravenously, Dr. William R. Barron, Columbia, S. C.

Some Popular Ideas about Insanity, Dr. R. L. Leak, Medical Director State Hospital for the Insane, Columbia, S. C.

Head Cold, Dr. E. W. Carpenter, Greenville, S. C.

Nasal Obstructions as a Causative

Factor in Middle Ear Diseases, Dr. W. C. Twitty, Rock Hill, S. C.

Some Aspects of Middle Ear and Mastoid Infection in Children, Dr. J. W. Jervey, Greenville, S. C.

Tonsillectomy with Local Anesthesia, Dr. Pinkney V. Mikell, Columbia, S. C.

Wednesday 8:00 to 10:00 P. M. Thestone Theatre, April 17th, 1918.

Address:

The Medical and Surgical Aspects of Coma, Dr. Martin H. Fisher, University of Cincinnati.

Patriotic Addresses by Representatives of the Government Services.

Public invited.

Thursday, April 18th, 1918, Thestone Theatre, 9:30 A. M.

Some Remarks on Gall Bladder and Duct Surgery, Dr. R. Lee Sanders, Memphis, Tenn.

The Conduct of the Physician and the Pharmacist in the Treatment of Drug Addicts, Dr. Louis D. Barbot, Charleston, S. C.

The Typhoid Carrier, Dr. F. M. Durham, Columbia, S. C.

The Value of Milk Diet in the Cure of Chronic Diseases, Dr. Sophia Brunsom, Sumter, S. C.

Empyema of the Pleura (Illustrated), Dr. A. R. Taft and Dr. J. H. Cannon, Charleston, S. C.

Factors in the Maintenance of the Position of the Abdominal Visera, Dr. W. F. R. Phillips, Medical College of the State of South Carolina, Charleston, S. C.

Pediatric Case Records, Dr. R. M. Pollitzer, Charleston, S. C.

Intussusception in Infants with a Report of two cases, Dr. D. Lesesne Smith, Spartanburg, S. C.

Commitment of the Insane, Dr. C. F. Williams, Superintendent State Hospital for the Insane, Columbia, S. C.

What shall we do with our Hernia



A Glimpse of the Lake at Vale of Montmorenci.

Cases, Dr. J. H. Johns, Westminster, S. C.

The Importance of Early Recognizing Mental Disorders, Dr. J. F. Munnerlyn, The State Hospital for the Insane, Columbia, S. C.

The Development of a Bureau of Child Hygiene by the State Board of Health, Dr. E. A. Hines, Seneca, S. C.

INFORMATION.

Badges may be had at registration Desk. Be sure to register promptly.

The Highland Park Hotel has been selected as the headquarters and place of meeting of the House of Delegates. The House of Delegates will convene at 10 A. M. Tuesday, April 16th, 1918. All Delegates should secure proper credentials before leaving home.

The Council will meet at 10 P. M. Monday, April 15th, 1918.

ENTERTAINMENT.

A smoker will be given to the House of Delegates Tuesday, 9:30 P. M. Highland Park Hotel. A general reception will be tendered the Association at the Highland Park Hotel Wednesday, 10:00 P. M.

ENTERTAINMENT FOR VISITING LADIES.

Special provision has been made for the entertainment of all visiting ladies.

SCIENTIFIC EXHIBIT.

There will be an interesting exhibit by the department of Anatomy and Pathology of the Medical College of the State of South Carolina.

HOTELS.

Highland Park, Headquarters, rates \$5.00, American plan.

The Wilcox, Tourist Hotel, American Plan, \$5.00.

The Olwell, Commercial Hotel, rate \$2.50, \$3.00 American.

A number of other high class hotels and boarding houses available.

RAILROAD CONNECTIONS AND SCHEDULES.

North-Western Section.

Via C. & W. C. Railway Company.

Leave Spartanburg, 7:05 A. M. and 2:30 P. M.

Leave Greenville 7:00 A. M. and 12:40 P. M.

Leave Laurens 8:38 A. M. and 3:50 P. M.

Leave Anderson 7:30 A. M. and 1:30 P. M.

Leave Greenwood 9:40 A. M. and 4:52 P. M.

Leave McCormick 10:34 A. M. and 5:47 P. M.

Arrive Augusta 12:30 Noon and 7:30 P. M.

Leave Augusta Via Trolley 1:00 P. M. and 8:00 P. M.

Arrive Aiken Via Trolley 2:30 P. M. and 9:30 P. M.

Eastern Section Via Charleston.

Leave Charleston 3:00 A. M., 8:00 A. M. and 5:15 P. M.

Arrive Aiken 8:06 A. M., 12:50 P. M. and 10:00 P. M.

Connections from Orangeburg and other points with the above trains. Pee Dee Section better served Via Charleston, Columbia or A. C. L. to Augusta, thence trolley.

Northern and Central Section.

Leave Rock Hill 5:50 A. M. and 7:48 A. M.

Leave Chester 6:38 A. M. and 8:22 A. M.



A SCENE ON THE WHITNEY DRIVE

Arrive Columbia 9:00 A. M. and
10:10 A. M.

Leave Columbia via Blackville 9:10
A. M.

Arrive Aiken 12:50 P. M.

Leave Columbia via Trenton 10:20
A. M.

Arrive Aiken via Trenton 1:30 P. M.
Upper Carolina via Columbia can
avail themselves of evening train leav-
ing Columbia at 5:50 P. M.

Arrive Graniteville 8:29 P. M.

Thenee take trolley 9:00 P. M.

Arrive Aiken 9:30 P. M.



AIKEN

“Queen of Winter Sports”

South Carolina



POLO AT AIKEN

An Aiken Day

"What temperament is to the individual, climate is to places," said David Gray in an article in Collier's half a dozen years ago for which Aiken furnished the inspiration and the theme. Declaring that it was climate that set the roots of slavery deepest in the South, and that it is climate again that is working the South's rehabilitation, Mr. Gray continued: "The chronicle of Aiken epitomizes very well the story of this new climate-born South. As a place of winter residence for Northern sunshine seekers it was discovered about thirty years ago by Miss Celestine Eustis, a sister of our late ambassador to France, who ever since has been its tutelary deity and genius. In 1880 it was still a desolate, war-saddened village, lost in the South Carolina pines and forsaken apparently of God and man. But in December and January mild, windless days of blue and gold wrapped the hills. In February the Spring stirred, and in March awakened. April was like the Northern June. These treasures no Union armies could destroy or Southern indolence impair."

Then Mr. Gray, who had just seen the Aiken season at its height, described an ideal Aiken day:

"Though simple and without pretense, Aiken as a playground affords a variety of amusement that is unique. One may begin the day in the frosty dark with fox-hunting, watch the sunrise like a stage spectacle behind the boles of mysterious pines, thrill with a gallop and the cry of Southern hounds, return for a second breakfast and a morning of polo or lawn tennis; after lunch shoot, or play golf or court tennis; then tea and bridge; then dinner and more bridge or puzzles. If

only the thirsts of life could be assuaged with games, this would be the fountain-head where all could repair and be satisfied. It is the paradise playground of a boy's dreams, but it is also something more."

GATEWAY TO BARNARD VILLA.

Climate, as nothing else, reflects its mood upon people. Climatological experts have declared the Aiken climate to be surpassed in salubrity only by that of Davos Platz, away up among the Switzerland Alps, and nowhere in America. The Aiken climate is irresistible, tempting, alluring. It calls to the out-of-doors, an appeal that is the stronger because of the seemingly inexhaustible store of charms and delightful possibilities of the out-of-doors in Aiken, the ideal wintertime playground.

Winter in Aiken has been interpreted by those who, once tasting the delights of a single season come back year after year, as a succession of days and weeks of outdoor life, breathing a tonic air that causes the pulses to beat with a fuller life, and more balmy sunshine than the almanac allows. Winter in Aiken is a revelry of glorious sunshine and bright and joyous days—Springtime ushered in with March, flanked with Spring flowers and Spring foliage, the shadows of the pine woods relieved by touches of color in the beautiful and fragrant jessamines and the dazzling kalmia and azalias which abound.

In such an ideal setting, like a jewel property placed, Aiken, the resort, gained recognition so long ago that, as an evidence of its celebrity, it has not been uncommon in more recent years to hear of other localities aspir-



WILLCOX INN: A Name Well Known By All Tourists.

ing to attract attention by claiming to be as healthy or as delightful as Aiken.

Aiken occupies the highest point of land between Charleston and Augusta—565 feet above sea-level, and 400 feet above Augusta, only 17 miles distant. The atmosphere of the plateau is bracing and exhilarating, and the dryness of the air is characteristic, statistical reports of the humidity of different resorts proving the Aiken climate drier than that of any other place in this country east of the Rockies, or of any of the principal European resorts reported, (Nice, for instance, being twelve percent moister than Aiken.)

The nature of the soil contributes almost as much to the salubrity of the place as the climate. Even the heaviest rains soak immediately into the loose sand, which, mixed largely with gravel to a great depth, lies upon a stratum of red clay or kaolin, thus affording a porous soil. In passing it is interesting to note that once a visitor from bonny Scotland found even the Aiken rain dry!

Add to these lavish endowments of nature an average daily mean temperature during the coldest season—from the middle of December to the middle of March—of about 49 degrees (sufficient to escape the lassitude incident to hot climates), and sunny Aiken's peculiar appeal to the pilgrim from the cold, blustering North and East is readily understood.

In these ideal surroundings social advantages and facilities for recreation and pleasure are unequalled, and Aiken stands preeminent, "Queen of Winter Resorts." Here scores of the most prominent families of America, forming the "Aiken Colony," winter. They maintain handsome homes, and in conjunction with the people of Aiken, they have beautified the town—

or, at the very least, their influence has been felt in the work of years that has achieved the "Town Beautiful."

The Aiken Club, was formed in 1897. In addition, there is the Palmetto Golf Club, the pretty home of which perches upon a green knoll on the Palmetto Links, declared to be the finest south of Washington. The 18-hole course is about three miles around, and here, as on the Highland Park Links, which also affords an attractive club house, many of the crack American players may be seen during the winter season.

At the famous Whitney track, a splendid polo field has for a number of years past attracted professional and amateur polo enthusiasts from far and near.

Golf, polo, pigeon-shooting, dove-drives, fox-hunting,—these are among the diversified possibilities, and in Aiken one falls quite naturally into that which appeals to his sportmanship or desires.

Hundreds who come to Aiken ask nothing more than that they be left to enjoy life out-of-doors. For these, Aiken, with the surrounding country scenery and miles and miles of fine country roads, holds peculiar charm.

Forests of the yellow Southern pine, which finds here its congenial habitat, border the town, filling the atmosphere with the delicious balsamic odor exhaled from leaves and trunk; and through one of these dense forests "Whitney Road," a picturesquely beautiful highway, threads its poetic way up hill and down hill and through sighing pine forests and jessamine groves, through avenues of blossoming dog wood—leading past Sand River and Devil's Backbone, through Lover's Lane, down by the old mill and the pond, all of which Gonvener Morris has so skillfully woven into his delightful stories of Aiken winter life.



PALMETTO INN: Miss Estey's Popular Tourist Inn.

In Aiken and among those who return each season to escape the severity of Northern winters and to enjoy at first hand the exhilaration of new-born Spring—for it is seemingly Spring-time in Aiken before it is anywhere else—the motor car has not yet, and perhaps never will, replace the horse. And in and around Aiken a man's horse is no less familiar with the bridle-paths than is he.

Aiken, the town, with a normal population of approximately 5,000 affords every convenience of a city with none of the city's inconveniences. With splendid schools and excellent churches (of all denominations), Aiken is a little city of residences, hotels, shops, stores and banks, an ideal place to live the year round, as numbers of citizens who first came here as visitors have discovered. The water is pure and the sewerage perfect. Physicians have never known a case of malarial disease to originate here.

Aiken is an ideal place to live the year round, but more particularly through the winter months—a town of beautifully parked, wide streets, of trees and shrubbery, where one may get all the elbow-room that may be desired, where property values are within reach of even the man of modest means, and climatic conditions and modern city conveniences combine to form a splendid retreat for a vacation, a winter season's stay or for a permanent residence.

Fertile farming lands lie in easy reach of the town, and throughout the section lying upon the plateau which Aiken graces the same climatic conditions prevail. Some of the most progressive farmers throughout the Aiken section have migrated here from the North. The main crops are corn, cotton, wheat, melons, oats, sugarcane and fruits, and Aiken affords a splendid

market for the truck farmer. All the conditions for successful agriculture and fruit culture exist here, and in this favored section the farmer enjoys the distinct advantage of being enabled to work out of doors all the year round, raising two crops a year.

All denominations are represented in the several Aiken churches. A progressive set of men administer the affairs of the city. Aiken has three banks, attractive stores and shops, and two newspapers—The Aiken Standard, edited by Walter Duncan and The Journal and Review.

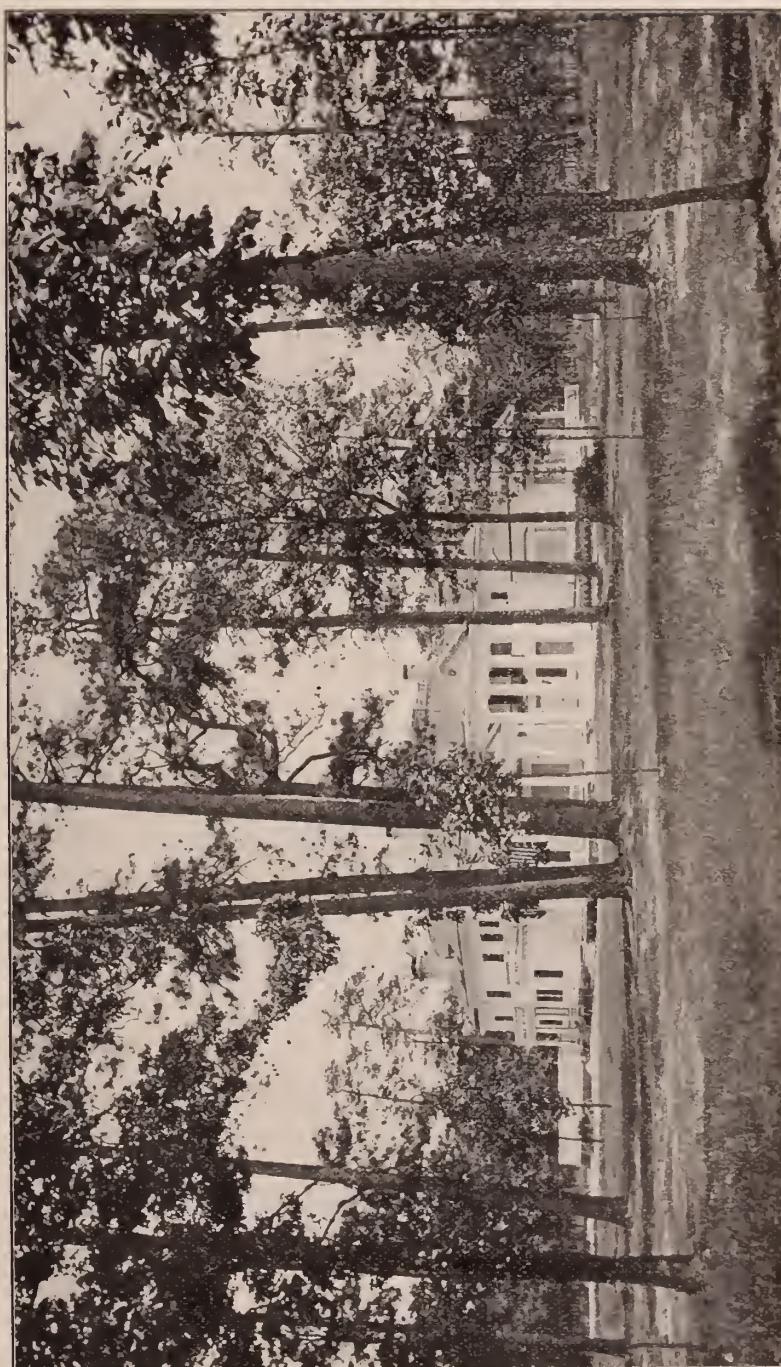
At the Thestone Theatre, owned and operated by the City of Aiken, a well-appointed playhouse built a few years ago and, incidentally, affording the largest stage in the South with the single exception of a theatre in New Orleans, some of the highest class attractions which make Southern tours, appear during the winter seasons.

AIKEN'S HOTEL FACILITIES.

On the site of the old Highland Park Hotel, in its day perhaps the foremost tourist hotel in the South, which was destroyed by fire nearly eighteen years ago, the New Highland Park has been erected. This hotel was completed last year and thrown open for the reception of guests, for the first time, in January 1915.

The location is ideal—in the heart of the town, a block from the business section and the post office, yet bordering the edge of a dense forest. The Highland Park Golf Links adjoin the hotel grounds.

Perhaps sentiment is not entirely lacking in making this the ideal hotel site in Aiken, for who is there who knows Aiken intimately who has not read, among the stories of the resort in its earlier days, Octave Thanet's



BARNARD VILLA: (On Whiskey Road) Leased to Marshall Field, Occupied by Moore.

"Bishop Vagabond?" In the thread of this, the most characteristic portrayal, the most typeal story of Aiken life that has been written, the memory of the old Highland Park is woven as delicately as lace-work.

The New Highland Park, of Spanish architecture, presents a most attractive exterior, crowning the highest point in a reservation of 400 acres. The view from the upper balconies and porticos over densely wooded hills and across a verdant dale through which a splendid road winds its way to the golf links in the open, is magnificent and inspiring. The hotel offers every comfort and convenience.

In addition to the Highland Park, Wileox's Inn, catering to an exclusive clientele, the Olwell Hotel, Palmetto Inn and the York House are among Aiken's hotel facilities, besides a large number of private residences which are open through the winter season for the entertainment of guests. The visitor to Aiken, whether for a day or for the season, experiences no difficulty in finding entertainment to suit his individual taste and requirements.

The Aiken Hospital while not a gift to the people of Aiken is nearly so. For a number of years efforts had been put forth to raise a fund sufficient to build and maintain a modern hospital. The Relief Society had done good work along this line and had succeeded in getting together a few thousand dollars to be used specifically for building a hospital when, a few years ago, the Aiken County Hospital Association was formed to aid the Relief Society in the raising of this fund, the latter organization likewise doing good work. But the magnificent Aiken Hospital was made possible only through the generosity of some of the winter residents, who, headed by Mr. and Mrs. C. Oliver Iselin, Colonel Anthony R. Kuser and William K. Vanderbilt, actually gave the money necessary to build and equip the hospital, then provided a fund adequate for its maintainence for five years.

The hospital was built and equipped at a cost of approximately \$65,000.00 of whieh the funds raised by the Relief Society and the Aiken Hospital Association formed the nucleus.

It is an interesting fact that the first superintendent of the Aiken Hospital, Mrs. Mary Eden, of Pennsylvania, is serving in France, in charge of a unit of thirty-five Red Cross Nurses.

THE NEW AIKEN HOSPITAL.

Few cities of even much greater population may boast of hospitals comparing favorably with the Aiken Hospital, which while necessarily small, lacks nothing in completeness. Located at the edge of the town, in a pretty park—the land donated by the city—The Aiken Hospital was completed and opened in the Spring of 1917. The hospital contains five private rooms, wards to accomodate twenty-four patients, an operating room, office, nurses' apartments, waiting rooms, instrument rooms, and every modern equipment.

THE AIKEN COTTAGE SANATORIUM.

An important institution from the medical standpoint is the Aiken Cottages. This is a sanatorium for incipient tubercular patients. Established twenty-one years ago on a firm financial basis, this home for the incapacitated has done a great work. Its subsistence is due to the bounty of its founders and friends, who provided an endowment fund whieh has



ROSE HILL: Residence of Mrs. Sheffield Phelps, Directress of Woman's Work of the Red Cross.

rendered it free from financial troubles. The institution has seventeen beds. A nominal board of Five Dollars a week is charged each man. This amount, of course, is but a fraction of the cost of the maintenance of the patient, which includes full and careful medical attention. Men are received whose condition evidence a possibility of recovery, and during the years of its service, many patients through the splendid care given them here, combined with the wonderful curative pro-

perties of Aiken's noted climate, have been restored to health and strength.

Much of the undoubted success of the Aiken Cottages has been due to the indefatigable efforts of the late Dr. C. F. McGahan, who for years was the physician in charge. Dr. McGahan gave labor, time, energy and learning unstintingly to this work. From the opening Dr. McGahan was ably assisted by Miss N. Borgman, a competent graduate nurse who is still matron of the institution.



The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

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Annual Subscription, \$2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.

J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.

WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital,
Boston, Mass.

OBSTETRICS AND GYNECOLOGY.

ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.

G. T. TYLER, M. D., Greenville, S. C.

R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.

J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.

E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

TRIBUTE TO DR. R. L. MOORE BY COLUMBIA MEDICAL SOCIETY.

Adopted at the regular meeting in
March:

Whereas, The Columbia Medical Society has suffered a severe loss through the death of Robert L. Moore;

Be it resolved, That said Columbia Medical Society place on permanent record this appreciation of those rare qualities which shall for all time serve to inspire and encourage to finer work the men who knew him, as well as those who come after him. Dr. Moore exemplified in his private life the highest ideal of Christian manhood. In his professional work he was noted for his conservatism; his careful avoidance of untried fads, his treatment of the patient rather than the treatment of some exploited disease. He proved in

his daily life that sweetness, gentleness, and piety are not incompatible with virile manhood. His family has lost an ideal parent—his group of friends, a keystone, his profession, a model.

Be it further resolved that the publication of this preamble be requested in the Journal of the South Carolina Medical Association.

Respectfully submitted,
The Columbia Medical Society.

ASSOCIATION MEETING IN AIKEN THIRTY YEARS AGO.

A brief investigation of the archives of the State Medical Association discloses the fact that we met in that delightful city April 12th and 13th, 1887. Dr. Cornelius Kolloek was President at that time and Dr. John L. Dawson Corresponding Secretary.

Dr. H. W. De Saussure was the Treasurer. The Association had approximately, one hundred members.

Much of the program, strange to say, was devoted to a discussion of the effects of tobacco and such distinguished physicians as Drs. Howe, C. W. Kollock, J. L. Dawson, W. Peyre Porcher and B. F. Wyman entered into it with zest.

Abdominal Surgery was by no means new to the members of the State Association thirty years ago. The President, Dr. Cornelius Kollock, reported a number of cases as also did Dr. R. A. Kinloch. We are pleased to note the beautiful tribute to Aiken by the Honorable James Aldrich who delivered the welcome address in behalf of the citizens as follows:

As the law commands, and the interest of your profession require, climate and location, and their influences upon diseases, will be, inter alia, subjects for discussion and investigation in this meeting; it is, therefore, eminently fit and proper that the Medical Association should meet in Aiken. Situated on the summit of the high table-land or watershed, which separates the valley of the yellow Savannah from the vale of the limpid Edisto, and famed for its pure and salubrious climate, it is the "city of refuge" to the victims of pulmonary diseases. By the advice of learned physicians, practising in widely separated localities, thousands of these victims come, with the coming of the Northern snow, to spend their winters here. Nor do they come in vain. It has been said that there is no cure for consumption—that dreaded disease which indifferently enters the palace of the rich, or the humble cabin of the poor: when the trusted family physician, with bated breath and aching heart, tells us that a loved one has

this dreaded malady, we lose all hope save that reposed in the Great Physician. The victim seeks our "city of refuge." In this beautiful town of Aiken, the hectic flush gives place to the rosy tints of health and beauty, the haggard eye brightens into the glad-some smile, the labored breathing changes to regular and gentle respiration, the hacking cough silenced, the narrow chest expands, the feeble steps grow into the firm walk, the mind, grasping anew its trust in hope, and revelling in the vigor of returning health—the patient is well.

AN UNUSUALLY ATTRACTIVE PROGRAM.

We have discussed the matter of having a well balanced program each year and have thought that each year we were progressing and approaching nearer the ideal. We are confident such is the case this year and call especial attention to several features. In the first place the Scientific Committee has provided a Symposium on Military Medicine and Surgery which, necessarily is the most important subject now before the profession of the world, yet we have not thought it necessary to take up all of the time of the members with this subject, however urgent it may be. The specialties are well represented in the program, practically all of the leading branches of medicine present papers. We are loath to believe that there is a doctor in South Carolina who if he should avail himself to this meeting will not return to his labors a wiser man. There is ample scope for both specialist and general practitioner to derive much benefit from participating in this meeting. While there are perhaps one hundred members in the service of our country, we believe there should be an



NEW CITY HOSPITAL, AIKEN, S. C.

attendee of not less than two hundred at the Aiken meeting. If the weather is good the automobile may be used from a large section of the state to advantage. We have made note of the railroad schedules also for the convenience of our members and surely one-third of our membership can find the time to spare at least one day attending the State Medical Association this year.

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SOCIETY REPORTS

COLUMBIA MEDICAL SOCIETY.

The Columbia Medical Society met in regular session March 11, 1918 at Ridgewood Club. The president, Dr. C. L. Kibler in the chair. Owing to the fact that we had not completed our annual election in December we attended to this matter before taking up the program.

Requiring an additional delegate to serve at State Association the ballot resulted in the election of Dr. S. E. Harmon who with those held over (Dr. F. A. Coward, Dr. W. R. Barron, Dr. N. B. Edgerton) constitute our representatives.

Election of Board of Censors resulted as follows: Dr. J. H. Taylor for 3 years, Dr. Jane Bruee Guignard for 2 years, and Dr. G. H. Bunch for 1 year.

The scientific part of the meeting opened with a report of two cases of intestinal intussusception by Dr. S. E. Harmon. The first case was that of a child in which 18 inches of bowel were telescoped. Relieved without resection. Cause of death given as toxemia. The second case was relieved by resec-

tion, and at time of report was making a normal recovery. Dr. Harmon stressed the importance of resecting the telescoped portion of bowel as well as the advantage of making diagnosis under the relaxation of an anesthetic.

Dr. Harmon's report was enthusiastically discussed by the following members: Dr. F. A. Coward, Dr. J. A. Hayne, Dr. F. M. Durham, Dr. G. H. Bunch, Dr. Jane Bruee Guignard, and Dr. J. H. Taylor.

A resolution was adopted by the society to meet the state dues of absent members engaged in military services. Secretary requested to notify said members of such action.

The President appointed the following members on the Library Committee: Dr. W. R. Barron, Dr. Jane Bruee Guignard, and Dr. F. M. Durham. Public Health and Legislation, Dr. J. H. McIntosh, Dr. R. T. Jennings, and Dr. G. H. Bunch.

After adjournment the president, Dr. C. L. Kibler, entertained with a reception and luncheon.

Edythe Welbourne,
Secretary.

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JAMES A. HAYNE, M. D.
President South Carolina Medical
Association, 1918.

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ASSOCIATE EDITORS.

INTERNAL MEDICINE.

J. H. GIBBES, M. D., Columbia, S. C.

GENITO-URINARY DISEASES AND SEROLOGY

M. H. WYMAN, M. D., Columbia, S. C.
SURGERY.

PEDIATRICS.

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G. T. TYLER, M. D., Greenville, S. C.

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EYE, EAR, NOSE, AND THROAT.

E. W. CARPENTER, M. D., Greenville, S. C.

OBSTETRICS AND GYNECOLOGY.

ATMAR SMITH, M. D., Charleston, S. C.

EDITORIAL

DR. JAMES A. HAYNE, PRESIDENT SOUTH CAROLINA MEDICAL ASSOCIATION, 1918.

The election of Dr. James A. Hayne to the Presidency of the South Carolina Medical Association will be gratifying to a large number of the profession within and without the State. Dr. Hayne has taken great interest in the activities of the State Medical Association throughout his entire membership and after he was made State Health Officer by virtue of his office, he has been more intimately in contact with the profession and the public than any other physician in the State. It is fortunate at this time when tremendous public health problems confront us in South Carolina, that Dr. Hayne should have been elected President for he has had a number of years experience as an army surgeon as well

as intimate first hand knowledge of the sanitation of the Panama Canal Zone. The State Medical Association, during these war times, will require unusual activity from all of its officers in order that the organization may be kept intact and in good working order. By virtue of his public position Dr. Hayne will be able to bring to this phase of his duties as President the special privileges which his position as State Health Officer command.

We present herewith a resume of Dr. Hayne's life and work. Dr. James Adams Hayne was born in Baltimore, Md., March 18th, 1872, the son of Theodore Brevard and Lillah Adams Hayne. He attended the South Carolina Military Academy, Charleston, 1887-8, the University of South Carolina 1889-90, the University of Virginia, 1890-91, also the Maryland Medical College. Graduated from the Medical

College of the State of South Carolina, Charleston 1895. Post Graduate work New York Post Graduate Medical School, 1905. In October 1897 Dr. Hayne married Miss Fannie Douglass Thorn, of Blaekstock, Chester County. In 1895 he began the practice of medicine in Greenville, South Carolina. Was examining Surgeon Pension Bureau Washington, 1904-5, also Member of Board U. S. Pension Examiners, Isthmian Canal Service, 1907-9. Upon the resignation of Dr. C. F. Williams, State Health Officer in 1911, Dr. Hayne was eleeted by the executive committee to fill this most important position. The highly creditable work of his predecessor and the wise foresight of the executive committee had brought the State Board of Health of South Carolina to the forefront in public health work in the United States. Dr. Hayne entered upon his new work with a broad general training and special training in the army and in the Canal Zone and the great expansion of the activities of the State Board of Health has been due in no small measure to his executive ability and enthusiastic leadership. Our new President has a war record of which he is proud. He was a corporal in Company D, 1st, South Carolina Volunteer Infantry in the Spanish American War May-November 1898. Later he became a First Lieutenant in the Medical Reserve Corps of the United States Army April 1909 to May 1911. Dr. Hayne is at present a Lieutenant in the Medical Reserve Corps, and was recently called into the service, but by special resolution of the Legislature and the urgent request from numerous sources the Adjutant General of the Army revoked the order in the interest of the public health of South Carolina. Dr. Hayne is a member of numerous organizations among which are The

American Medical Association, The American Public Health Association, the Southern Medical Association, The American Civie Association, The National Association for the Study of Pellagra, The Assoeiation U. S. Military Surgeons, The South Carolina Medical Association. Is also a member of the following fraternities Phi Kappa Psi, Masons, Knights Templar. He is a Democrat and an Episcopalian, his home is at Congaree, South Carolina, office Columbia South Carolina.

URGENT CALL FOR MORE DOCTORS FOR THE ARMY AND NAVY. A. M. A. TAKES ACTIVE STEPS.

The Secretary has just returned from a meeting of the State Secretaries called by the Ameriean Medical Association at Chicago, April 30th to devise ways and means to secure our states quota of additional doctoors for the army and navy. About forty state Secretaries were present and a resolution was adopted to the effect that the President of each State Assoeiation should appoint a war committee of three members one of whom may be the State Seeretary, for the purpose of presenting to the profession of the state, the urgent éall of the army and navy for a minimum of 150 additional physieians from South Carolina before July 1st. The Ameriean Medical Assoeiation with its vast and powerful machinery will be able to materially assist the government in supplying the doctors called for. It is expected that every County Society in the state will seriously consider this proposition at the earliest possible moment. The plans of the state War Committee wil be forthcoming at an early date and aggressive work begun. South Carolina has at the present time, approximately 225 physicians who have receiv-

ed commissions in the various branches of the service. There will be a cordial cooperation of the War Committee of the American Medical Association with all the agencies existing to the one end of meeting the present emergency.

STATE COMMITTEES COUNCIL NATIONAL DEFENSE CALLED TO WASHINGTON MAY 4TH AND 5TH.

In order that the Committees might hear the annual reports of the various committees in charge of the work of the Medical Section of the Council of National Defense and confer as to the immediate need of securing more doctors for the army and navy, practically every state was represented at Washington May 4th and 5th. The members of the committee from South Carolina who attended this meeting were as follows:

Dr. R. S. Catheart, Chairman, Charleston, S. C.

Dr. Robert Wilson, Charleston, S. C.

Dr. James A. Hayne, Columbia, S. C.

Dr. Edward Rutledge, Charleston, S. C.

Dr. W. M. Fennell, Rock Hill, S. C.

Dr. LeGrand Guerry, Columbia, S. C.

Dr. E. A. Himes, Seneca, S. C.

The State Committee has appointed a committee of five of which Dr. Robert Wilson, Jr., is the Chairman, to begin an aggressive campaign towards securing the additional doctors for the army and navy.

THE AIKEN MEETING A SUCCESS.

There was some apprehension on the part of the officers that owing to war conditions the Aiken meeting might fall short in both attendance and interest. We are delighted to report this true only in part. The attendance was

about 175 which, tho a smaller number than for some years, we consider remarkably good. The profession of Aiken and the citizens made our stay very pleasant indeed. The management of the Highland Park Hotel our headquarters, deserves unstinted praise for their efforts to make us comfortable and happy. The fact that practically the entire Association was under one roof with ample accommodations was one of the most attractive features of the meeting. We heard a number of our members say, that this was the most enjoyable meeting of their entire experience and that the paper of Dr. Martin Fisher of the University Cincinnati, alone, on the Medieal and Surgical Aspects of Coma, was worth the time and expense of attending the meeting.

Much of the meeting was devoted to military matters and most excellent addresses were made by various officers of the service. Major McLain of the Surgeon Generals Office made a stirring appeal for more doctors for the Medieal Reserve Corps. The address of Captain Percy of the British army was listened to with especial interest.

The Association went on record as desirous of making a change in the length of time given over to the presentation of papers, therefore, the Association in future will have only a two days session, the first day will be taken up by the House of Delegates and on the afternoon or evening of this day will be held the opening exercises of the scientific session and the same night probably some social feature. On the morning following, which will be Wednesday, the Association will enter directly upon the reading of papers and discussions and ought to be able to accomplish, by this plan, a satisfactory result. There has been an idea prevalent that unless one should secure a place on the program the first

day of the scientific session, there would be a small audience and, therefore, little inducement to read a paper and experience in the past justifies such a conclusion. The new plan will entirely eliminate this idea. So long as the war goes on there will probably be a dearth of scientific papers. Another step forward by the Association was the appointment of a standing Committee on the Study and Prevention of Infant Mortality. This committee will be charged with the whole proposition of cooperating with the various agencies at work during the war for the reduction of Infant Mortality and Child Welfare Work generally.

The Association will meet at Florence in 1919 on an invitation extended by the retiring President, Dr. F. H. McLeod.

The officers elected for the ensuing year were as follows:

Dr. James A. Hayne, Columbia, S. C., President.

1st. Vice President, Dr. E. T. Kelley, Kingstree, S. C.

2nd Vice President, Dr. S. M. Pitts, Saluda, S. C.

3rd Vice President, Dr. W. T. Hall, Aiken, S. C.

Secretary-Treasurer, Dr. E. A. Hines, Seneca, S. C. Re-elected.

Councilors: 2nd District, Dr. J. S. Matthews, Denmark, S. C.

4th District, Dr. L. O. Mauldin, Greenville, S. C.

6th District, Dr. C. R. May, Bennettsville, S. C.

7th District, Dr. S. E. Harmon, Columbia, S. C.

8th District, Dr. W. P. Timmerman, Batesburg, S. C.

AN IMPERATIVE APPEAL FOR MEDICAL OFFICERS.

An urgent and imperative appeal has just been issued by the Surgeon General of the United States Army, for doctors for the Medical Reserve Corps.

There are today, 15,174 officers of the Medical Reserve Corps on active duty and the Medical Department has reached the limit of medical officers at the present time available for assignment. With these facts before the medical profession of this country, we believe that every doctor who is physically qualified for service between the age of 21 and 55 years, will come forward now and apply for a commission in the Medical Reserve Corps.

The Surgeon General says: "So far the United States has been involved only in the preparatory phase of this war. We are now about to enter upon the active or fighting phase, which will make enormous demands upon the resources of the country." The conservation of these resources, especially that of man-power, depends entirely upon an adequate medical service.

Drafts of men will continually follow drafts, each of which will require its proportionate number of medical officers and there are at this time on the available list of the Medical Reserve Corps, an insufficient number to meet the demands of these drafts.

The real necessity for the complete mobilization of the entire profession is imperative. It is not a question of a few hundred men volunteering for service, but of the mobilization of the profession for the conservation of the resources of this country. Set every doctor who reads this editorial and appeal from the Surgeon General, which appeal is based upon dire necessity, act promptly and present his ap-

plication for a commission in the Medical Reserve Corps at the nearest Medical Examining Board. If you are not informed of the location of your Board, the Editor of this journal will advise you.

STAND BEHIND THE BOYS.

How many doctors have applied this now very expressive phrase to themselves? There is nothing that puts more heart and gives so much confidence to a soldier in the thick of a fight, than the thought that if he does suffer a casualty, he will receive proper medical care and attention. What are you doing in this respect?

There are many boys, sons of your patients or friends who have been or will be called into the service, and what a source of consolation it would be to the parents to know that possibly their own doctor might be the one to look after their boy and they will welcome

your acceptance of a commission in the Medical Reserve Corps and compliment you for so doing.

The opportunity for you to do the most good in a professional way to the greatest number of people, is to offer your service to your country through the medical Reserve Corps. Do not think longer about it, but apply at once to your nearest Medical Examining Board, and if you are not informed of its locality, the Editor of this journal will supply the necessary information.

Stand by our boys, your boys, their boys. Remember the gallant French in '76. The British who stood by Dewey in 1898. The Garibaldis who were always for LIBERTY.

The rapid expansion of the Army calls for a largely expanded Medical Reserve Corps. The Surgeon General has issued a most earnest appeal for doctors. The Department has reached the limit of medical officers available for assignment.

ORIGINAL ARTICLES

THE WORK OF THE MEDICAL ADVISORY BOARD IN THE DRAFT.

By Kenneth M. Lynch, M. D., Member of the Medical Advisory Board of the Third District of South Carolina, Charleston, S. C.

“IN ACCORDANCE with the Selective Service Regulations prescribed by the President under the authority vested in him by the terms of the Selective Service Law,” there have been provided in the various

counties, cities, and other localities throughout the United States, Medical Advisory Boards, who will examine registrants sent to them by Local Boards or State Adjutants General concerning the physical condition of such registrants.

The personnel of these Medical Advisory Boards is not limited, is aimed to contain one or more qualified specialists in internal medicine, surgery, neurology, diseases of the genito-urinary tract, X-ray examination, dentistry, diseases of the eye, ear, nose and throat, and laboratory examination.

These men so appointed are giving

their time and services freely and fully to the furtherance of our military organization without recompense of any kind and commonly at no inconsiderable sacrifice.

The function of these Boards is purely advisory. They have no power to determine finally whether a registrant shall be accepted or rejected for military service. In other words Local Boards may or may not follow the advice of the Medical Advisory Boards to which their registrants are referred.

While a strict and full set of rules for the guidance of Medical Advisory Boards are laid down in the Manual of Instructions for Medical Advisory Boards, advice is also given that, "The members of Medical Advisory Boards should consider the regulations as a guide to their discretion. Therefore the regulations are not to be construed too arbitrarily. The object of the regulations is to procure men who are physically fit, or who can be made so, for the rigors of field service, and the determination of this question is left to the judgment and discretion of Local and District Boards as advised by local examining physicians and by the Medical Advisory Boards."

Under these regulations the boards entered into service the latter part of January and information should have been gained by now for some determination of the value of this new recruit in the execution of the Selective Service Law.

The Medical Advisory Board of the Third District of South Carolina, located at Charleston, is advisory to fifteen Local Boards in 12 counties having a total population of some 415,000.

The first examining meeting was held on January 26th, at which one registrant appeared.

Since that time and until April 11, when this was written, the Board has spent the afternoons of twenty-eight days in this work, meeting, at first, every day, later four days in the week, and at the present, twice a week.

It has examined and advised its Local Boards of the physical condition of one thousand one hundred and twenty (1120) men, the smallest number examined on any one afternoon being one, and the largest number one hundred and ten.

While the present purpose of the draft is to examine and classify physically all registrants in class one, there is considerable difference in the rapidity with which the Local Boards are putting the work through and only one of our Local Boards is practically through. From this board we have had 368 men while the average from all the boards is only 74. One of the Local Boards has sent no men at all and one has sent only five. Ten of them have sent from thirty to fifty.

Estimated on a basis of the number of men referred from the one Board which has finished with class 1, we expect to handle not more than five thousand men from this first class. Actually the number will probably be considerably below that figure for while this one Board sent a high proportion and practically every one which their regulations required them to send, it seems apparent that the other boards are not sending so high a proportion of their men. That however is approximately the number which would come to us if the Selective Service Regulations were followed strictly to the letter.

Now while regulations do not call for the presence of all the members of the Advisory Boards at all of the examining meetings, this Board has had all members in constant attendance

and each has taken his part fully and cheerfully.

Up to the present the total expense requisitioned for the work is \$39. This has been incurred in X-ray examination.

After the physical examination of a registrant the case is then considered by the Board as a whole and he is found to be physically fit for one of four classes.

If he falls within the standard of unconditional acceptance as prescribed in the Selective Service Regulations he is placed in Class A as physically qualified for general military service.

If he is found to have some remediable defect the relief of which will make him physically fit he is placed in Class B, as physically qualified for general military service when cured of the specified defect.

If he is found to have irremediable defect which disqualifies him for general military service and yet is capable of performing some special or limited service he is placed in Class C, as physically qualified for special or limited military service in a named occupation or capacity.

If he is found to be physically unfit for any of these three classes he is placed in Class D, as physically deficient and not physically qualified for military service.

A record of such finding is then made in triplicate and returned to his Local Board. Now while the Local Boards are not required to accept our findings, it is our information that they have done so in all cases but one. In this case we are informed that the affidavits of nine physicians who had known the registrant all his life caused the Local Board to reject the registrant after we had found him to be physically fit for general military service. This man was referred on account of a history

of recurrent appendicitis, and neurasthenia. In spite of the fact the Local Board is required by the regulations to "accept all registrants who give a history of abdominal trouble suggesting a chronic appendicitis and who on examination present no signs of such diseases." We found the man to be in excellent condition and with no signs of any disease.

This case was accompanied before the Board by his physician, and while information concerning the presence of diseases of an intermittent nature as for instance epilepsy or asthma is sometimes needed, it is well for this to be sought by the Board and we have been considerably annoyed and inconvenienced by apparent attempts on the part of members of the family of the registrant or his physician to influence the finding of the Board. Actually the appearance of such attendants with the registrant has not been in case where such history was needed but in cases in which the trouble even if present would not have been cause for rejection.

In judging the value of the work of the Medical Advisory Board it is interesting to note that in all except the one case our findings have been accepted, and only three of the men who we accepted and who have been sent to cantonment have been rejected there. These were cases of asthma in accordance with a specific regulation as we had no information as to their history.

Of the 1120 men we have examined 56 were transfer cases where the men were not convenient to their home boards. These cases now go to Local Boards. Of the others, 109 appealed from the finding of their Local Boards. One of these appealed because he had been rejected and wished to be accepted. The others appealed because

they had been accepted and it is very interesting to note that forty of the 108 men were rejected by this Board on some defect which disqualified them for military service. In many of these no defect was recorded by the Local Board. Some appealed on special points of which wererecorded by the Local Board. Some appealed on special points of which they knew, others because they thought they were not well but didn't know why. This fact throws considerable light on the large proportion of rejections at cантонment of men accepted by Local Boards in the previous calls, and there will no doubt be still many such rejections.

It is very interesting also to note how commonly our findings were not in accord with those recorded by Local Boards; usually there was no indication on the registrants papers of the intended disposition of the case by the Local Board but four of the Boards made a practice of classifying the men before they came to us. Of these four we reversed the decision of the Local Board in eleven out of twenty-six in one case, in 20 out of 38 in another, in 13 out of 41 in the third, and in 95 out of 125 in the fourth. We accepted for general service when they had been rejected 10; accepted for general service when they had been accepted for limited service, 42, rejected when they had been accepted for general or limited service 81, and accepted for limited service when they had been accepted for general 6. In other words we saved out of 230 men, 52 for general service who would otherwise have been rejected, and weeded out 87 who would have been sent to cантонment and then rejected, at expense to the government. Whether this proportion of reversals would apply to the other boards there is of course, no means of determining,

but even with a much lower percentage than existed in any of the four Boards one can see what it means in a saving of men to the military services, of expense to the Government, and of inconvenience and expense to the registrants.

Of the 1120 registrants which we have examined we have found 386 physically qualified for general military service, 54 physically fit for general service when cured of some remediable defect, 92 physically disqualified for any military service, 4 have been referred back for observation on some point which could not be decided at the present time, and 56 were transferred cases.

Of those found to have remediable defects there were 5 with anal fistula, 5 with venereal ulcers, 3 with defective teeth, 3 with marked hemorrhoids, 3 with incapacitating syphilis, 2 with uncinariasis, one with malaria, one with marked varicocele, and 31 with hernias.

The reasons for acceptance for limited or special service were underweight, in 30; defects of extremities in 20, cardiae disease in 16, defective teeth in 15, hemorrhoids in one, lung disease in 2, urethral stricture in one, speech defect in one, defective hearing in one, bunions in one, defective vision in one, hernia in one, and flatfoot in three.

Of the rejections 103 were for defective vision, 14 for defective hearing, 78 for underweight and poor physique, 63 for defects of chest, spine, head or extremities, as for instance, injuries, varicosities, deformities, chronic ulcers, arthritis, ankylosis, spinal curvature, loss of parts and hemiplegia, 27 for defective teeth (these being largely cases examined before the present regulations went into effect), speech defects 2, pulmonary disease

(largely tuberculosis) 37, disabling flatfoot 12, cardiac disease 117, obesity 3, bunions and callosities 5, mentally defective 4, goitre with tachycardia one, nephropathy 8, chronic appendicitis with adhesions one, urethral stricture 17, hernia, 2, gallbladder disease 3, chronic gastritis one, gastrojejunostomy one, diabetes one, tumors 2, chronic alcoholism one, epilepsy 6, arteriosclerosis one, chronic venereal ulcers 5, intractable amebic dysentery one.

There are none of these groups from which I would care to draw men acceptable for even special or limited service unless it be some with defects of vision or hearing. It has seemed to me that a man with good vision in one eye even though the other be absolutely blind or a man with good hearing in one ear even though the other be deaf should be capable of rendering service in a special or limited capacity; but the regulations are particularly specific in regard to the degree of vision or hearing acceptable for even special or limited service.

On the whole the attitude of the registrants to the draft has been excellent. Some there were, of course, who were anxious to be rejected, some were equally anxious to be accepted, usually they have accepted the findings cheerfully and without question and so far as I know only one case has appealed from our findings to the District Board. We have encountered and accepted quite a number of men who had been refused admittance to various services of their selection upon volunteering or who had been discharged for physical defects in spite of the fact that our regulations state that our rules and standards are based upon the same rules and standards that are to be followed by the military examining

surgeons at cantonments or recruiting stations. This would seem to be unfair and not conducive to good morale in such men.

Then of course we have encountered some cases of malingering. Some of these have been difficult of detection but usually it is plainly evident. If these men realized how difficult it is to beat the game and what a position it places them in, I doubt if even their moral tendencies would lead them to make the attempt.

THE EPIDEMIOLOGY OF CEREBRO-SPINAL MENINGITIS.

By James A. Hayne, M. D., State Health Officer, Columbia, S. C.

THE PURPOSE of this paper is not to present any new or strange facts in regard to this disease, which has demanded so much of the time and attention of the State Board of Health and the U. S. Public Health Service since the beginning of the epidemic which was about the 21st of December, 1917, and which I hope now has about run its course, although we have four cases reported to this office since the writing of the above. One death and three cases at York, and one case and one death at Wisacky, but to emphasize what we do know about the disease and how to best combat an epidemic when it makes its appearance in a community.

In order to properly protect the public against the disease, we must first know its etiology, its mode of transmission and what factors enter into its spread from the sick to the well.

Osler defines this disease as follows: An infection occurring sporadically

and in epidemics, caused by the diplococcus intra-cellularis meningitis, characterized by inflammation of the cerebrospinal meninges and a clinical course of great irregularity. Synonyms are spotted fever, malignant purpuric fever and epidemic cerebro-spinal meningitis.

It is not a new disease, having been described by Viensseux in 1805 at Geneva, and an account is given of an epidemic which occurred in 1806 at Medfield, Massachusetts. Strange to say, this disease was not very prevalent during the civil war. In 1904-1905 there were in New York 6,755 cases and 3,455 deaths. When the Canadian troops went to England in 1914-15 an epidemic occurred among them which spread to the civil population of England. This disease is essential when of early adult life, and is often found in camps and barracks. Fatigue seems to play an important part in lowering the resistance to the disease. It is not a very contagious disease, at least the majority exposed to it do not have typical symptoms of cerebro-spinal meningitis. More than one or two cases in a family is rare, and in the recent epidemic in this State some peculiar phenomena have been presented. At the South Carolina Military Academy one case and no more, although the cadets are in close contact. At Orangeburg in the State Colored College one case and no more, although the negroes sleep in barracks where there are one hundred or more. No other cases reported from this institution. At Anderson at the Girl's College one case occurred and no more. At Porter's Military Academy one case and no other cadets affected.

Bacteriology: Weichselbaum in 1877 described the organism which is found in the blood and in the various lesions of the disease. The Epidemiologist is

interested in the following facts about the organism:

1st. That it is a very fragile organism, and exposure to heat, sunlight and cold soon destroy it, hence there is little danger of its spread through clothing, etc.

2nd. That it is found in the nasopharynx of those who do not have the disease, as well as in the majority of cases where the disease is frankly present.

3rd. That there are several strains or varieties of the germ.

4th. That there is a curative serum.

Cerebro-Spinal Meningitis belongs to that group of diseases spread by the droplets sprayed from the nose and throat of those having the disease whenever coughing, sneezing or talking in close contact with other persons. Personal prophylaxis plays an important part in the prevention of the spread of this disease. Do not cough or sneeze unless mouth or nose is protected by a handkerchief. Avoid the use of common drinking cups. Avoid crowds, either in moving-picture shows, churches, Sunday schools, schools, passenger coaches and trains, and street cars when these are crowded. Rigid quarantine of camps and communities where the disease is epidemic is recommended. It is the bounden duty of each doctor to immediately report this disease to the health authorities. Telegraph the State Health Officer at once when you make the diagnosis or even suspect it, giving the name of the patient, age, and the number of cases. The physician attending the case should use a piece of gauze over nose and mouth, thus protecting himself against contagion, criticism and quarantine. Do not become panic-stricken. Remember that only about one in one thousand are susceptible to

the disease and that natural immunity is our ally.

Major Herrick of the U. S. P. H. Service, has so well brought out the symptoms and treatment of the disease that there is really nothing further that can be said. The results of the treatment at Camp Jackson speak for themselves. The wonderful reduction in the death rate from the original 33% to about 14% has been shown. This reduction is probably to be attributed to large doses of the serum, early recognition, the use of polyvalent serum, both the intra-spinous and intravenous use of the serum.

The two diseases that become epidemic which both effect the spinal cord might here be contrasted. I refer to acute anterior Polio-myelitis or infantile paralysis and epidemic cerebro-spinal meningitis. Both diseases are spread by carriers, but infantile paralysis may be also spread by insects, such as flies, and by fomites. In infantile paralysis a simple spray of a 1% menthol in oil seems to be sufficient to destroy the germ in the nasopharynx of carriers. Whereas in cerebro-spinal meningitis, sprays do not seem easily to destroy the organism. Both diseases affect children and young adults. Cerebro-spinal meningitis occurs less as warm weather approaches, although severe epidemics have occurred in the tropics; and in the 1914 epidemic of New York many of the cases were in mid-summer. Infantile paralysis occurs in late summer and early fall, ceasing with the advent of cold weather. It is rare in either disease to find more than one or two cases in the same family. In infantile paralysis, the spinal fluid is usually clear. In cerebro-spinal meningitis it is turbid. We owe much to R. H. von Ezdorf of the U. S. Public Health Service who made a careful study of this

disease and I do not think his rules can be much improved upon. Hence we quote several of the most important. They are:

- 1st. Prompt and early report of case.
- 2nd. Careful records be kept.
- 3rd. That large placards should be placed on the house and the house quarantined.
- 4th. The establishment of an isolation hospital for the cure and treatment with specific serum of cerebro-spinal meningitis cases only.
- 5th. Isolation of patients at their homes where no such hospital exists.
- 6th. Dispensaries where persons may be observed who have been exposed to the disease.
- 7th. Ample supply of the serum should be kept on hand by boards of health.
- 8th. A Medical inspection board should be provided to look up suspicious cases where probably no physician has been called in.
- 9th. The discouragement of large public gatherings.
10. The closing of schools, moving pictures, etc.
- 11th. The avoidance of crowding the street cars.
- 12th. The establishment of a proper laboratory where examinations can be made, both of the spinal fluid of patients suspected of having the disease, and for the examination of secretion taken from the nose and throat of persons who have been exposed to the disease.
- 13th. General quarantine is not necessary.
- 14th. Disinfection, except the secretions from the sick.
- 15th. Funerals should be absolutely private, not so much on account of the corpse, but on account of the fact that the family has probably come in

contact with the case and may be carriers.

In these troublous times when the stern necessity for winning the war exists we will have to expect this disease to be an ever-present menace in our midst, and every doctor will have to be on the alert and perfect himself in the art of lumbar puncture which appears a much more serious procedure than it really is. The doctor must learn how to give the serum intravenously as well as intra-spinously if he expects to save many lives, for we are bound to have meningitis among the new men brought to concentration camps, and if custom continues to prevail of giving weekend furloughs to the soldiers, the disease will continue to be carried to the civilian population, for culturing contacts does not mean that all who are carriers are discovered, as we have learned to our sorrow. The technique of these cultures and the growing of them on suitable media requires skilled bacteriologists, and even they sometimes fail us.

I have had a list of cases that have occurred in South Carolina since December, 1917 and also the deaths that have taken place up to March 1st. This is a record only of the civilian population. The cases and deaths in the camps especially have been almost equal in number.

The State of South Carolina owes an everlasting gratitude to the U. S. Public Health Service for its assistance in this epidemic and especially to Mr. Nathan Berman for his untiring zeal in traveling day and night over this State, administering serum, culturing contacts and giving valuable advice. The laboratory of the U. S. P. H. Service at Columbia has made 3733 of cultures of contacts of which only eight were carriers. The State Board

of Health has furnished over \$4,000 worth of serum since January 1st and has undoubtedly saved many lives. The map of South Carolina, which I show, plainly indicates the numerous foci of this dread disease and warns us that next fall and winter may show a more serious spread of the disease.

	Deaths.	Cases
Columbia	8	32
Society Hill	1	2
Greer	1	1
James Crossing	1	1
Darlington	1	2
Swansea	1	2
Ridge Springs	1	1
Spartanburg	1	6
Greenville	1	3
Charleston		2
Trenton		1
Honea Path	2	3
Orangeburg	4	5
Camden	1	1
McBee	1	1
St. Matthews		2
Bennettsville	1	3
Union	1	2
Abbeville	1	1
Greenwood		2
New Brookland	1	3
Timmonsville	1	2
Edgefield		2
Cross Hill		2
Mullins		1
Newberry	4	5
Chester	1	3
Ft. Mott	1	1
Carlisle	1	2
Darrough	1	1
Florenee		2
Pendleton		1
Dillon		1
Sumter	1	1
Tindal	1	1
Cope		2
Helema	1	2
Conway	2	2

Norway	1
Lockart	1
Hartsville	1
Littlerock	1
Beach Island	1
Kershaw	1
Graniteville	1
Ward	1
Ridgeway	1
Barnwell	1
Blackstock	1
Pickens	1
Pelzer	1
Estill	1
Longton	1
	—
	44
	121

Weekly Reports of Meningitis, to
Surgeon General:

December 31st	8 cases.
January 7th	4 "
January 14th	7 "
January 21st	5 "
January 28th	13 "
February 4th	16 "
February 11th	24 "
February 18th	29 "
February 25th	25 "
March 4th	20 "
March 11th	8 "
March 18th	18 "
March 25th	6 "
April 1st	5 "
April 8th	9 "
April 15th	6 "
	—
	191 cases

Suspects

A CONSIDERATION OF THE PROPER MANAGEMENT OF OBSTETRICAL ENGAGEMENTS IN SPARSELY SETTLED DISTRICTS.

By D. H. Smith, M. D., Glenn Springs,
South Carolina.

I WISH to invite your attention to a few remarks on a subject which seems to me, of more than ordinary importance. One that has not been discussed in this august body recently.

I will endeavor to outline to you what I think to be the proper management of Rural Obstetrics. Now, usually pregnant women who reside several miles from the Obstetrician, whom they select to attend them during their confinement, are at a great disadvantage, both they and their Physician, in that they have not the opportunity for a consultation, which they all need during the period of gestation, and more especially during the last four months.

Now, what I am going to say about the proper handling of this important part of the practice of medicine, may possibly incriminate some of us with "sins of omission."

I think we should assume charge of the pregnant woman, at the 4th or 5th month, after ascertaining the probable date of conception and confinement, and make due entry thereof. We should first make a thorough examination, including pelvimetry in a Primapara and give them specific directions in writing as to their mode of living concerning diet, clothing, exercise, etc. Also directions for sending a specimen of urine to the office to be examined twice a month, 'till the 7th month then once a week until confinement, also recommend that they notify the

Read before the South Carolina Medical Association, Aiken, S. C., April 17, 1918.

physician in case of swelling of the hands, feet or face—disturbance of vision, persistent constipation, persistent headache, scanty urine, loss of blood; and also when they feel that they are not as they should be.

I think that blood pressure tracings should be taken every two or three weeks during the latter months, stressing especially the pulse pressure.

We all are aware of the fact that pregnancy is a physiologic state, but we too often neglect to bear in mind that it sometimes approaches very closely to the Pathological, and when it does; we are confronted with most critical conditions, probably complications on the part of the kidneys are the most serious. These however, may be avoided in certain well selected cases and with a proper regard for the teachings of Prenatal care. But in cases of uremia which have resisted all attempts as to correction—I think we should consider very seriously the advisability of inducing premature labor or terminating gestation and we are all more or less familiar with the latest approved methods of doing this. I think the risk of developing kidney complications during the latter months of gestation, may be largely averted by the restriction, or interdiction, of protein or nitrogenous foods. I would recommend the taking of fruit acids which are burned to alkali, also Potassium Bitartrate, 1 or 2 ozs a day, when there is a high ammonia coefficient, or other indications demanding treatment.

Now, to consider our conduct after having received a call to attend the patient who is in labor. A call of this kind takes precedence over all others and should be responded to promptly, without hesitation or loss of time, lest the stork, who is a good traveler, and who does not have to contend with long

muddy roads, punctures or engine trouble, supersedes us and has the baby named when we arrive, which to say the least is embarrassing.

Now, having arrived, we should walk in quietly, with an easy assuring manner, leaving the obstetrical bag on the outside, or in an adjoining room. First wash the hands, examine the patients tongue and pulse and general appearance, make inquiry as regards her bowels and kidney function and general well being, etc., then palpate and auscultate thoroughly the abdomen and ascertain whether or not the woman is in labor—by noting with the palpating hand rhythmic contractions of the uterus, of characteristic duration and recurrence. If in labor, a hot soap suds enema, using quart of water sometimes has a good effect; advise her to keep the bladder empty, remain in bed and utilize the pains. Then we can sit down in some cases, assuming an air of masterly inactivity, telling them that the duration will depend upon the strength of the pains.

We are sometimes entertained with several "Old Dippers" of the community, who have come to see and encourage the patient; by telling of a similar case which they waited on, where the woman would have died, had she not put a pillow under her hips or given her pepper tea "Conceited old grannies" these are.

Make as few vaginal examinations as possible. First wash the hands and lower arms with green soap and brush in hot water, then soak well in 1-2000 Hgel Sol, use 1-2000 Hgel Sol to sponge off Vulva and Perineum and do not try to do this under the covering. The patient can be draped, and exposed this can properly be done. Use sterile rubber gloves and operating gown. Do not rupture Membranes

'til cervis is well dilated, them do so between the pains, and if Hydramnios or excessive a amniotic fluid, do not let it come in a gush at once, as the umbilical cord may become prolapsed and cause asphyxiation. After thorough dilatation, when there is a tendency towards inertia uteri, and I think delivery per-vagina possible, I have used 10-12 minimis Pituitrin with marked success, and I would recommend it instead of the Obstetrical forceps, which may cause so much injury to Mother and child. But neither of these should be used in a case that is progressing normally, or to save the time of the Obstetrician; should be used only when there is a well marked indication with which we are all more or less familiar.

I think obstetrical cases should be handled similar to major surgical operations, be they where they may, with a strict regard to aseptic technic, for sometimes the Obstetrician perchance may forget to wash his hands, being out in the country at night and not being as careful as he should, and the case will come off without any undesirable features—he making several examinations under the covering, and about the 3rd or 4th day he will be called to see the patient and find on examination, a very sick woman with high fever, rapid pulse and headache and general malaise and a foul smelling Lochia, and will get a history of the patient having had a chill on the 3rd day. He may possibly sometimes say: I was careful to wash my hands, and observed cleanliness. I say not Bacteriological cleanliness, for the Streptococcus Pyogenes, Aureus, the Staphylococcus, Epidermidis Albus, and the bacillus Pyocyanes got in there from under his finger nails and they

have taken up their abode in that patients genital tract, and they are coming out victorious in the battle with which they are waging against the Phagocytes, and there is a strong possibility that there will be a funeral in that community within a day or two, and the life of this poor woman, probably a mother of several small children, is sacrificed on account of carelessness and negligence on the part of a 20th century Doctor.

Now, gentlemen, this is deplorable; and however black the above picture may seem it too often occurs, due most often to a disregard to bacteriological cleanliness.

Now to revert back to the delivery of the child. When the head comes down and stretches the Perineum, it should be supported with a clean towel under the hand and avoid precipitate delivery. A lacerated Perineum should be sutured, and all perineums should be carefully examined after delivery, and regular examinations made during the Juergen. I think Credes method is a good one for delivering the placenta I usually give 15 drops of ergotole after delivery of the placenta and make the patient as comfortable as possible, applying an abdominal binder, and give them directions as to diet and time for remaining in bed, and prescribe proper laxatives. I think it a good practice to see the patient within 24 hours after delivery, and also make daily calls for several days after.

The baby should be examined carefully also—the condition of its bowels and kidney function and the umbilical cord should be examined also. In dealing with this subject I have not gone into details but only stressed the more salient points.

— SOCIETY REPORTS —

OCONEE COUNTY.

The Oconee County Medical Society met at Walhalla March 29th, 1918. The following members being present: Drs. E. C. Doyle, J. H. Johns, J. S. Stribling, E. A. Hines, W. A. Strickland, J. W. Bell, J. W. Wycliffe. On motion Dr. F. T. Simpson, of Westminister was received as a new member.

The Owen Bill was discussed and the Secretary instructed to write our representatives in congress that the Oconee County Medical Society unanimously favored its passage.

On motion the members of the Society in the service are to be retained in good standing by the Society paying their dues to the State Association. Drs. J. H. Johns and W. A. Strickland discussed the work of the past year of the Oconee Hospital at Westminister. The members of the Society congratulating these gentlemen upon their success.

The following officers were elected for the ensuing year:

President, Dr. W. A. Strickland, Westminister, S. C.

Vice President, Dr. J. H. Johns, Westminister, S. C.

Secretary-Treasurer, Dr. E. A. Hines, Seneca, S. C.

Censors, Dr. Wycliffe, West Union, S. C.; Dr. E. A. Hines, Seneca, S. C.; Dr. J. W. Bell, Walhalla, S. C.

Delegates, Dr. J. S. Stribling, Seneca, S. C.; Dr. J. W. Bell, Walhalla, S. C.

MINUTES OF THE HOUSE OF DELEGATES, SOUTH CAROLINA MEDICAL ASSOCIATION, APRIL 16, 1918.

The House of Delegates was called to order by Dr. K. M. Lynch, First Vice-President, on Tuesday morning, April 16, 1918, at the Highland Park Hotel.

Doctors E. W. Carpenter, Chairman, W. P. Timmerman and L. M. Stokes, were appointed the Committee on Credentials.

Dr. Carpenter: The President has asked me to present this to you as the list of credentials. Any one present whose name is omitted please indicate it to me.

Dr. Timmerman: Mr. President, we failed to receive the credentials of Dr. Briggs of Edgefield, in an official capacity, but I did receive a communication from Edgefield saying he was the official delegate. I move that he be enrolled as the delegate from Edgefield County.

Motion seconded and carried.

Dr. Wyman: I move that the two members from Florence County be seated as delegates.

The Secretary: Their report has not come in yet.

Dr. Neuffer: It seems to me that this proceeding is a little irregular, inasmuch as a county is not entitled to any representation until its report comes in and the dues have been paid. I understand from the Secretary that the report of that county has not come in, and I move that the motion be tabled until the report comes in.

Motion seconded and carried.

Motion that Dr. Baxter Haynes be substituted for Spartanburg County, in the absence of one of the regular delegates.

Motion seconded and carried.

Report by the Secretary-Editor-Treasurer, Dr. E. A. Hines, as follows:

(See report)

Dr. Laneaster: I move that the Secretary's Report be received as information.

Dr. Lynch: There is a recommendation in regard to the appointment of a committee on Infant Mortality. Does that include that recommendation?

Dr. Laneaster: Yes, sir.

The Secretary: Most of them are appointed by the new President. May we not leave it to the President?

Dr. Laneaster: I move that the new President make this appointment, then.

Motion seconded and carried.

Report of Scientific Committee:

The Secretary: I would say this: I had a letter from Dr. Catheart recently, stating that the regretted he had been unable to call this Committee together on account of a great amount of work he has had to do since he was elected.

I would say for Dr. Catheart that we have conferred with the President and the Committee the best we could by letter, and the program before you is mainly the result. Dr. Catheart is responsible for the program on Military Surgery, and for several other papers.

The idea of electing this Committee was to relieve the Secretary of the Association of much of the work of getting up the program, but war conditions came on and only in part has that been discharged. That is the report Dr. Catheart asked me to present.

Dr. Timmerman: That Committee is elected each year?

The Secretary: One each year. It is a rotating committee.

Dr. Timmerman: I move that it be accepted.

Motion seconded and carried.

Report State Board of Health.

Dr. Gambrell: Mr. President, Dr. Wilson, the Chairman, 'phoned us last night that it would be impossible for him to be here in time this morning, and asked us to submit a report which he would enlarge on later. Dr. Hayne State Health Officer, has a report and I will ask him to submit a report, or so much as he sees fit, from the copies which he has. Dr. Hayne is present.

Dr. J. Adams Hayne: Gentlemen, I will try to be very brief with this. Dr. Wilson usually makes a condensed report which is based upon the reports of the different departments of the State Board of Health. The report from the laboratory strikes me as very important. This I would like to read, with your permission. (See report.)

Now, of Rabies examined, 89 specimens--the heads. 38 negative, 2 doubtful, the rest positive, making 49 against 40, showing about half were reported as negative. And when you think that the head is sent there because it is suspected that dog has rabies, and not to see what breed of dog it is, the remarkable thing is that only half of them are found positive.

One point ought to be brought out in the State Board of Health report this year: the increase in communicable diseases in the State, due to the bringing in of fresh elements of infection from neighboring states, by the families of campers and cantonments. There is no state, probably, in the Union, at present, that has anything like the burden placed upon it that has been placed upon South Carolina by these camps and cantonments. When you take into consideration that Camp

Green in North Carolina is just across the border, and that the soldiers come here to visit, and the camp at Augusta is just over the border, that Wadsworth is at Spartanburg, Sevier at Greenville, Jackson at Columbia, a naval station at Paris Island, a large number of troops at Fort Moultrie, and a naval training station at Charleston, you will see that there is probably a larger number of troops in South Carolina than in any other state in the Union, and we have passed certain regulations, in order to conserve the health of the population. (See report.)

In this emergency the Legislature did not see fit to appropriate any more money than they have done regularly for the prevention of contagious diseases. They appropriated \$20,000, this year, as they have done for the past five years. It would have been absolutely impossible for the State Board of Health to furnish serum or the antitoxins, so we called upon the United States Public Health Service, and they sent into this State many men who have been carrying on this work more or less successfully, and I do hope that the medical profession will understand the situation and will co-operate heartily with these men who are doing this work in the State. Dr. Wilson will prepare the regular report, which will be sent to the Secretary of the Association.

I thank you for your attention.

Upon motion, duly seconded, above report received as information.

Report of Committee on Health and Public Instruction.

Dr. Gantt: I have not had any communication from Dr. Weston during the year. I had simply an announcement from the Secretary of my appointment on this Committee. I think the work has been going on, though, and it has been through the Women's

Clubs. Just how much of that work this Committee can take credit for I do not know, as I have not heard from Dr. Weston.

Report on Study and Prevention of Tuberculosis:

Dr. Adams Hayne, State Health Officer: I will read Dr. Ernest Cooper's report as he could not leave the sanatorium, having a good many patients that he could not leave.

Mr. President and Fellow Members:

As Chairman of the Committee on Tuberculosis, the following report is submitted.

Anti-Tuberculosis work in South Carolina advanced more in 1917 than any previous year. The Legislature through its wise generosity provided for greatly needed buildings at the South Carolina Sanatorium, whereby the capacity was increased from thirty-two to fifty-six patients. These buildings are thoroughly modern in arrangement and equipment, being heated by steam and lighted by electricity. Institutions for the treatment of tuberculosis are maintained by Richland and Greenville counties, while Sumter County is now building such an institution. An additional sum of \$5,000.00 as a war fund to be expended by the Co-operating Committee was placed at the disposal of the State Board of Health for the cure of drafted men found to be tuberculous. The State Board of Health also proposed to the Federal Government to care for the enlisted men from South Carolina who might be incapacitated for duty by tuberculosis.

The interest and zeal displayed in the sale of Red Cross Seals is another indication of the impetus Anti-Tuberculosis work received during the past year. Through the earnest efforts of Dr. L. A. Riser and his active assistants, more than a million seals were

sold, an increase of more than 300% over the sales for 1916. This sale brings the splendid sum of \$10,000.00 into the State for Anti-Tuberculosis activities. The major portion of this sum will be devoted to the employment of Public Health nurses who will work in homes and schools; furthermore this fund has been supplemented by some counties, so as to secure more intensive work within their respective borders.

Intensive Anti-Tuberculosis Campaigns will be continued in ten towns of the State during 1918. Tuberculosis surveys will be made, a list of the homes in which deaths from the great white plague have recently occurred will be secured through the Bureau of Vital Statistics, and special examinations and instructions given the families upon the infectiousness of the disease, its cause, symptoms, prevention and cure.

Interest in the fight has not been confined to the white people. The negroes are greatly interested. Under the leadership of an intelligent nurse of their own race, they are contributing freely and are making efforts to secure a Sanatorium for themselves. The negro's exposure to tuberculosis as a race is comparatively recent. He has not the racial resistance of the white man; this with his poverty, bad habits, and ignorance makes him an easy victim. To protect him and to protect the white race with which he is so intimately associated, anti-tuberculosis measures for his benefit are imperative, and institutions for the treatment of tuberculous negroes is needed.

The death rate from tuberculosis has been steadily declining for fifty years, the decrease in South Carolina during the last four years has been about 33 1-3%. Since no specific has been discovered we may assign the im-

provements to "better and more food per capita, better housing conditions, less exposure to hardships, early diagnosis, early treatment, the growth of the hospital sanatorium and dispensary idea, better milk and a more enlightened attitude on the part of the public towards transmissible diseases.

"In the great emergency arising from the conflict of nations, we must retain and encourage the intensification of the methods and conditions which have proved valuable in the past and which no radical innovation has yet arisen to supplant."

Respectfully submitted,

Ernest Cooper,

Chairman of the Committee on Tuberculosis.

Dr. Timmerman: I feel that there is a very great need for the negroes afflicted with tuberculosis, in South Carolina, in order that they may be successfully treated. One of the most important reasons, apart from our love for the colored race generally, I might say, is the danger to the people themselves. The people have negro servants for all purposes, and especially for their laundry purposes. That being the case they are very liable to be infected from this particular source. Therefore I move that we memorialize the Legislature to provide a sanatorium for negroes.

Dr. Hayne: I am certainly glad that Dr. Timmerman introduced this resolution. I think it is very timely. The negroes in the State are very anxious to have this. They are going around the State getting up subscriptions, and remember that the negro is not so poor as he once was. They do not expect the State to support their people, but to provide a house where they can be taken care of, and I think we ought to do it for our own, as well as for their sakes.

Motion carried.

Report of State Board of Medical Examiners.

Report of the State Board of Medical Examiners of South Carolina for the year 1917:

The Board met at the State House at 3 p. m., June 11, 1917, and November 12, 1917, and registered applicants to practice medicine and for nurses' registration.

At 9 p. m., the Board met at the Hotel Jerome with the following members present: Drs. Harry H. Wyman, J. J. Watson, John Lyon, H. L. Shaw, E. W. Pressly, A. Moultrie Brailsford, J. T. Taylor and A. Earle Boozer. The annual election of officers was held, and the following were elected: President, Dr. Harry H. Wyman; Secretary-Treasurer, Dr. A. Earle Boozer.

The examination questions proposed by the members were considered and approved, and the following order of examination was adopted: Tuesday, 9-12, Dr. Wyman; 3-6, Dr. Shaw; 8-11, Dr. Watson. Wednesday, 9-12, Dr. Lyon; 3-6, Dr. Taylor; 8-11, Dr. Pressly. Thursday, 9-12, Dr. Brailsford; 12-3, Dr. Boozer.

In accordance with a resolution adopted by the House of Delegates at the meeting in April, 1916, the nurses were given practical examination in June and November, 1917, as follows: Practical and Surgical Nursing, Drs. Wyman and Boozer, at State Hospital for Insane.

Applicants For Examinations.

Doctors, June, 47; November, 22	69
Nurses, June, 28; November, 53	81
<hr/>	
Total	150

Doctors.

White males	58
Colored males	5
White females	5
Colored females	1
<hr/>	

Total	69
-----------------	----

Nurses.

White	81
Colored	0
<hr/>	

Total	81
-----------------	----

Grand Total	150
-----------------------	-----

The Board met at Columbia, S. C., in July and December, 1917, to tabulate the grades made by the applicants at the June and November examinations, with the following results:

White, passed 37; colored, passed, 1; total	38
---	----

White, failed, 26; colored, failed, 5; total	31
--	----

Total	69
-----------------	----

Nurses.

White, passed, 52; colored, passed, 0; total	52
--	----

White, failed, 29; colored, failed, 0; total	29
--	----

Total	81
-----------------	----

Grand total	150
-----------------------	-----

A. Earle Boozer, M. D.,
Secretary.

Report Received As Information.
(Minutes continued next issue.—Ed.)

Report of Secretary Treasurer.

The year 1917 put to the supreme test organized medicine in America. Our entrance into the world war necessitated and secured the cooperation of the medical profession to a degree unheard of in all previous history. The members of the South Carolina Medical Association have heeded the call and responded promptly and nobly.

About 225 physicians of this state have entered the army and navy and many others engaged in the arduous duties of the advisory, local and district exemption boards. Your Secretary was appointed medical member of the District Exemption Board for the Western District of South Carolina at Greenwood, July 21, 1917 and since that date has been engaged much of his time in that work. The affairs of the Association however do not appear to have suffered greatly by this enforced absence from the home office, except from the impossibility to make personal visits to constituent societies. The membership which had been increasing in recent years showed practically no decline from the highest point ever reached. The total was 738 December 31, 1917—a loss of only two members.

We can readily foresee a different status in a year or two unless the county societies see to it that every member who goes into the service is kept in good standing and others who remain at home and are not yet members are brought into the Association. Reports indicate that we may confidently look forward to this being done. It is highly important that the entire organization be kept intact and in smooth running order since it is through these channels the government will continue to reach the profession in the great crisis now confronting us. As was anticipated the regular scientific meetings of some of the county societies disclose lessened interest while of those in the neighborhood of the cantonments the reverse is true. Many of the officers of the County Societies have been called to the colors thus removing an inspiration in some instances not easily remedied.

According to the instructions of the House of Delegates the pledge cards

to conserve the practice of members in the service and turn over one-third of the fees collected to their families were printed and sent to each member. Up-to-date 145 have been signed and returned. They are still coming in. The meagre information at hand forces the conclusion that as yet this plan has not been a very satisfactory solution of the problem, though the necessity is not now acute.

Death claimed a number of our prominent members in 1917. The Secretary has endeavored to present as much information as possible about them to the Committee on Necrology.

Your Secretary has but one recommendation to make, but deems this of no small importance: Viz: That a standing committee on the Study and Prevention of Infant Mortality be elected or appointed consisting of three or five members. The tremendous responsibility resting upon the nations at war to conserve child life should be met first of all by organized medicine and such a committee will find ample scope for their energies. The midwife problem alone may well engage the attention of the wisest of us.

The maternal deaths in South Carolina in 1917 No. 392.

The Infant deaths in South Carolina in 1917 No. 5365.

The still births in South Carolina in 1917 No. 2881.

This state has been asked by the Federal Government to save 2149 babies in 1918, beginning April 6th, the campaign to last for one year. Many problems will arise from time to time as the war goes on to be placed in the hands of this Committee if one be available.

The Journal passed through the year with reasonable success from a financial standpoint. The advertising receipts being greater than in any year since

the Journal began publication. On the other hand expenses in general have shown a constant tendency upward. Postage for instance has practically doubled. A fortunate printing contract however has encouraged the management but there is no assurance as to how long this may be the case.

A summary of the finances of the Association and Journal is herewith presented, the items having been checked up by the Auditor and placed in the hands of the President and Chairman of Council.

**REPORT OF DR. E. A. HINES,
TREAS., OF THE SOUTH CARO-
LINA MEDICAL ASSOCIATION
FOR YEAR ENDING DECEMBER
31ST 1917.**

Anderson, S. C., Feb. 15th, 1918.
Dr. E. A. Hines, Seety-Treas.,
South Carolina Medical Association,
Seneca, South Carolina.

Dear Sir:

In accordance with your instructions, I have audited the books and accounts of the South Carolina Medical Association and attach hereto statements, made in the form of your Annual Report to the Association, which exhibits the Receipts and Disbursements for the year ending December 31st, 1917, also a Statement of the Assets of the Association, there being no Liabilities.

Respectfully,

C. C. DARGAN,
Public Accountant.

**REPORT OF
DR. E. A. HINES, TREASURER
OF
SOUTH CAROLINA MEDICAL ASSOCIATION
FOR YEAR ENDING
DECEMBER 31ST, 1917.**

RECEIPTS:

Balance Cash or Hand January 1st 1917 \$ 560.72
Annual Dues:

Anderson County Medical Society	\$ 86.00
Aiken County Medical Society	30.00
Abbeville County Medical Society	12.00
Barnwell County Medical Society	18.00
Bamberg County Medical Society	22.00
Beaufort County Medical Society	2.00
Chesterfield County Medical Society	14.00
Cherokee County Medical Society	12.00
Clarenden County Medical Society	14.00
Charleston County Medical Society	144.00
Columbia County Medical Society	142.00
Calhoun County Medical Society	16.00
Chester County Medical Society	46.00
Darlington County Medical Society	40.00
Dorchester County Medical Society	20.00
Edgefield County Medical Society	12.00
Florence County Medical Society	22.00

Georgetown County Medical Society	2.00
Greenwood County Medical Society	32.00
Greenville County Medical Society	118.00
Hampton County Medical Society	6.00
Horry County Medical Society	16.00
Kershaw County Medical Society	20.00
Lexington County Medical Society	26.00
Laurens County Medical Society	46.00
Lancaster County Medical Society	8.00
Lee County Medical Society	10.00
Marion County Medical Society	12.00
Marlboro County Medical Society	30.00
Newberry County Medical Society	42.00
Orangeburg County Medical Society	32.00
Oconee County Medical Society	26.00
Pickens County Medical Society	42.00
Saluda County Medical Society	18.00
Sumter County Medical Society	38.00
Spartanburg County Medical Society	108.00
Union County Medical Society	22.00
Williamsburg County Medical Society	16.00
York County Medical Society	50.00
	<hr/>
	\$1,372.00

Miscellaneous Items:

Refund Freight on Safe	5.69
	<hr/>
	\$1,938.41

DISBURSEMENTS:

Salaries	450.12
Office Expense	99.42
Office Furniture	136.00
Traveling Expense	92.25
Steu. Report of State Meeting	122.00
Loan to Norwood Mem. Fund Committee	117.38
Advance to Journal Account	672.39
	<hr/>
Balance Cash on Deposit with Seneca Bank	\$ 248.85
	<hr/>

**SPECIAL FUNDS
OF
SOUTH CAROLINA MEDICAL ASSOCIATION
DECEMBER 31ST, 1917**

Fund for Prosecution of Illegal Practitioners:

Balance Cash on Hand January 1st, 1917	\$ 137.13
Interest paid by Seneca Bank	8.22
Balance to Credit of Account January 1st, 1918	145.35
Sims Memorial Fund:	
Balance Cash on Hand January 1st, 1918	50.00
Norwood Memorial Fund:	
Balance Cash on Hand January 1st, 1917	5.00
Collected from Association Members	7.25
Borrowed from Association	117.38

	\$ 129.63
To credit of Committee	122.38

Balance Cash on Hand January 1st, 1918

\$ 7.25

STATEMENT OF ASSETS:

Cash on Deposit with Seneca Bank to credit of Association	\$ 248.85
Cash on Deposit with Seneca Bank to credit of Special Funds	202.60
Office Furniture & Fixtures	220.00

	\$ 671.45

I hereby certify that the foregoing statements of the South Carolina Medical Association, showing Receipts and Disbursements, Balances to credit of Special Funds and Statement of Assets and Equipment, are correct as shown by their books as at December 31st, 1917. I have verified the credit of each of the Special Funds and of the Association at the Seneca Bank, Seneca, S. C., and find same to agree with amount shown by books of the Association.

C. C. DARGAN,
Public Accountant.

**REPORT OF
DR. E. A. HINES, EDITOR
THE JOURNAL
OF
THE SOUTH CAROLINA MEDICAL
ASSOCIATION
For Year Ending
December 31st, 1917.**

C. C. DARGAN,
Public Accountant
Anderson, S. C.

Anderson, S. C., Feb. 15th, 1918.

Dr. E. A. Hines, Editor,
The Journal of the South Carolina
Medical Association,
Seneca, S. C.

Dear Sir:

In accordance with your instructions, I have audited the books and accounts of the Journal of the South Carolina Medical Association and attach hereto statements, made in the form of your Annual Report to the Association, which exhibits the Receipts and Disbursements for the year ending December 31st, 1917, also a statement of the Assets of the Journal, there being no Liabilities.

Respectfully,

C. C. DARGAN,
Public Accountant.

**REPORT OF
DR. E. A. HINES, EDITOR
OF
THE JOURNAL
OF
THE SOUTH CAROLINA MEDICAL ASSOCIATION**

RECEIPTS:

Balance Cash on Hand January 1st, 1917	\$ 606.57
Subscriptions	694.00
Advertising	1,701.85
Advanced by Association	732.39

	\$3,734.81

DISBURSEMENTS:

Salaries	\$1,911.58
Printing	1,063.16
Office Expense	98.00
Traveling Expense	125.00
Office Equipment	16.50
Miscellaneous Items	22.00

	\$3,236.24
Balance Cash on Deposit with Seneca Bank	498.57

	\$3,734.81

STATEMENT OF ASSETS:

Cash Deposit with Seneea Bank	\$ 498.57
Office Furniture & Fixtures	172.50
Certificate of Deposit, Seneca Bank	1,000.00
	<hr/>
	\$1,671.07
	<hr/>

ITEMIZED STATEMENT OF SUBSCRIPTIONS BY COUNTIES:

Anderson County Medical Association	\$ 43.00
Aiken County Medical Association	15.00
Abbeville County Medical Association	6.00
Barnwell County Medical Association	9.00
Bamberg County Medical Association	11.00
Beaufort County Medical Association	1.00
Chesterfield County Medical Association	7.00
Cherokee County Medical Association	6.00
Clarendon County Medical Association	7.00
Charleston County Medical Association	72.00
Columbia County Medical Association	71.00
Calhoun County Medical Association	8.00
Chester County Medical Association	23.00
Darlington County Medical Association	20.00
Dorchester County Medical Association	10.00
Edgefield County Medical Association	6.00
Florence County Medical Association	11.00
Georgetown County Medical Association	1.00
Greenwood County Medical Association	16.00
Greenville County Medical Association	59.00
Hampton County Medical Association	3.00
Horry County Medical Association	8.00
Kershaw County Medical Association	10.00
Lexington County Medical Association	13.00
Laurens County Medical Association	23.00
Lancaster County Medical Association	4.00
Lee County Medical Association	5.00
Marion County Medical Association	6.00
Marlboro County Medical Association	15.00
Newberry County Medical Association	21.00
Orangeburg County Medical Association	16.00
Oconee County Medical Association	13.00
Pickens County Medical Association	21.00
Saluda County Medical Association	9.00
Sumter County Medical Association	19.00
Spartanburg County Medical Association	54.00
Union County Medical Association	11.00
Williamsburg County Medical Association	8.00

York County Medical Association	25.00

	\$ 686.00
Subscriptions from Non-Members	8.00

Total	\$ 694.00

I hereby certify that the foregoing statements of the Receipts and Disbursements and the Statement of Assets for the year ending December 31st, 1917, are correct as shown by the books of the Journal of the South Carolina Medical Association as at that date.

C. C. DARGAN,
Public Accountant.

Why Oats Hold Unique Place

They supply in food units 1810 calories per pound.

That's 90 per cent more than round steak—10 per cent more than wheat.

Served with milk they supply a perfectly balanced food, with all needed elements.

They are rich in minerals, particularly phosphorus and lecithin.

They supply the vitamins.

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They supply ideal food at a minimum cost. Quaker Oats cost 5 cents per 1000 calories.

Eggs cost 10 times as much.

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Quaker Oats is flaked from just the big, plump oats. We get but ten pounds from a bushel. On that account it stands supreme in flavor, as all the world has recognized. Yet it costs no extra price.

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ISAAC M. TAYLOR, M. D., Supt. and Resident Physician.



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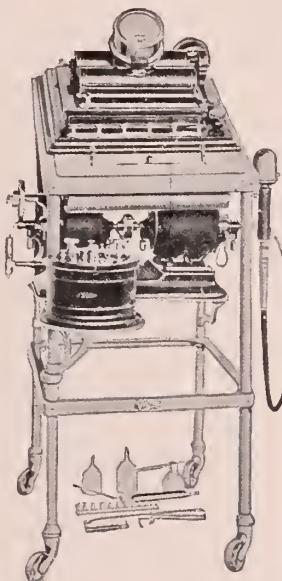
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- Coolidge Controls
- Protective Appliances
- X-Ray Plates and Films
- X-Ray Timers
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- Dark Room Accessories
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- Vibrators



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- Galvanic Controllers
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- Faradic Coils
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Cows' milk affords the most satisfactory artificial food for infants.

But the fact that cows' milk that is not pure is frequently an active agent in the transmission of disease makes the question of the purity of the milk used one of paramount importance.

Borden's Eagle Brand Condensed Milk is always clean, safe and dependable. It is prepared under sanitary conditions from selected high-grade cows' milk and sugar.

Samples, analysis and literature will be mailed on receipt of professional card.

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Every-Day Bran Food

Pettijohn's is a delightful mixture of wheat flakes, oat flakes, and bran flakes.

It is a studied food, to make a flavorful breakfast dainty which people will continue.

It is 25 per cent bran, yet the smoothness so hides it that people forget it.

It is more efficient than ground bran. It is better than clear bran, because it is inviting.

Thousands of physicians find that people who need bran welcome a Pettijohn diet.

Note the formula.

Pettijohn's

A Flaked Cereal Dainty
55% Wheat Product — 20% Oats — 25% Bran

Soft, flavorful wheat and oats rolled into luscious flakes, hiding 25 per cent of unground bran. A famous breakfast dainty.

Pettijohn's Flour is 75 per cent Government Standard flour mixed with 25 per cent tender bran flakes. To be used like Graham flour in any recipe; but better, because the bran is unground.

The Quaker Oats Company
Chicago
(1918)

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Hebe has been tested and recommended as follows:—

for Coffee

Hebe gives coffee a tempting, golden-brown color and enhances its flavor. Hebe helps to make delicious cocoa and chocolate.

for Cooking

Dilute Hebe with pure water to the richness desired. Use it in all recipes for soups, oyster stews, gravies, sauces, creaming vegetables and fish, making custard, cookies, puddings, desserts, etc.

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Pour Hebe diluted, or undiluted if preferred, over corn flakes, wheat flakes, puffed grains, porridge, oatmeal, etc. Cereals cooked with Hebe are most appetizing.

You may live in a section where Hebe cannot be obtained. As production increases, the needs of your section will be supplied through your local retail grocer.

THE HEBE COMPANY, CHICAGO AND SEATTLE, U. S. A.

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It's very important that Physicians specify Pompeian Olive Oil when suggesting Olive Oil to patients, and insisting on patients securing this Standard Brand.

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THE STANDARD IMPORTED OLIVE OIL

The Journal OF THE South Carolina Medical Association



Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, \$2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.

J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.

WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Charleston, S. C.

OBSTETRICS AND GYNECOLOGY.

ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY

M. H. WYMAN, M. D., Columbia, S. C.
SURGERY.

G. T. TYLER, M. D., Greenville, S. C.

R. LEE SANDERS, Memphis, Tenn.

PUBLIC HEALTH.

J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.

E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

EX-PRESIDENTS ACTIVE.

At the meeting held in Columbia Friday, June 21st of the State Committee National Defense we noted six Ex-Presidents of the South Carolina Medical Association present as follows: Drs. T. Grange Simons, Robert Wilson, Jr., C. W. Kollock, G. A. Neuffer, F. H. McLeod, Maj. Curran Earle and President James A. Hayne.

Surely such sustained interest is an inspiration to the entire membership of the State Association.

DEATH OF DR. O. B. MAYER.

As we go to press we learn of the death of Dr. O. B. Mayer, of Newberry. This news will be received with great

sorrow by many hundreds of the physicians of South Carolina who knew Dr. Mayer intimately. We are confident that no member of the South Carolina Medical Association rendered more conspicuous service over such a long period of time. For at least a quarter of a century he was a leader of marked ability in numerous positions of the trust and honor. He had served as President but perhaps his most signal service was as Chairman of Council during the constructive period of our reorganization when we were growing from a membership of 150 to over 750, establishing a Journal, creating a progressive State Board of Health and State Board of Medical Examiners, etc.

Proper tribute will be paid by the Necrology Committee at our next meeting to this distinguished physician.

STATE COMMITTEE MEDICAL SECTION COUNCIL NATIONAL DEFENSE MEETS—CALLS FOR MORE DOCTORS.

The State Committee charged with the duty of supplying the Surgeon General with 200 more doctors for the Reserve Corps met at Columbia on Friday, June 21st. The report showed

renewed interest in the matter but we are far short yet of our quota. The committee decided to ask every County Society to call a meeting at once and urge members who can do so to sign a volunteer agreement for the Committee in order that there may be definite data to work upon. This plan in a general way was instituted by the Orangeburg Society.

ORIGINAL ARTICLES

THE APPLICATION OF MILITARY SANITATION IN SMALL TOWNS AND RURAL DISTRICTS.

By Francis L. Parker, M. D. Charleston,
S. C.

PERHAPS in no field have observations in war been of greater value than in sanitation. These observations have confirmed the importance of observing the strictest sanitary precautions not only in camps and garrisons, but in the districts immediately surrounding them; and of requiring the civilians in these districts to conform with military regulations for cleanliness and sanitation.

For a long time no attention of any kind was paid to sanitation in small towns and rural districts. Fortunately the sparse population, and the natural agencies of disinfection and purification afford protection in most cases. Later precautions were observed in the location and care of water supplies on account of the well known relation between them and certain diseases. More recently the proper

disposal of excrement and garbage has been considered, but more with the view of providing comfort than as a precaution against infection. Though flies and mosquitoes have been heralded as the carriers of filth and disease, little attention is paid to them, except to screen against them as a nuisance. No care is taken to prevent their breeding; and few are informed as to how they breed, and how to avoid hatching places for them.

The reasons for this lack of interest and indifference in matters pertaining to cleanliness and sanitation are unfortunate but evident. Under the present method of administration of our sanitary laws, we can only request, advise and plead with our rural citizens to observe ordinary precautions in the disposal of waste products we can not require them to.

The military authorities are more fortunate in their administration. As soon as a camp is located, an inspection is made of all of the adjacent towns and habitations, and arrangements are made with the civil authorities to enforce certain regulations. If this does not prove satisfactory, they require enforcement through commercial channels, by not permitting soldiers or their families to live in

Read at meeting of the South Carolina Medical Association, AIKEN, S. C.,
APRIL 17, 1918.

towns that are not properly sanitized, or to enter stores, cafes, and places of amusement that do not provide suitable conveniences, and do not make proper disposal of their wastes. Frequent inspections are made of these places, and in most cases the regulations are carefully complied with. The regulations are simple, easily understood and explained, and can be enforced without undue hardship or expense to the owners of property. The following were the regulations drawn up by the military authorities of Fort Oglethorpe and Chickamauga Park, Ga., for the residents of Walker County, Georgia. A copy was sent to each property owner:

Sanitary Rules and Regulations for Residents of Walker County, Ga.

1—Specifications for Sanitary Privy or Toilet.

Pit to be covered with a fly tight box.

Box to have hinged lids; these lids to be so arranged as to permit of their falling as person gets up from seat.

Contents of privy to be sprinkled with a liberal quantity of quicklime twice a week.

2—Specifications For Hog Pens.

Each Pen to be clean and dry.

No wallowing places to be allowed.

Houses to be kept clean and dry; roof to be water tight and house to be kept free from wetting by rain on the sides.

Houses to be cleaned daily and manure to be kept so as to prevent fly breeding.

Feeding platforms to be of concrete and cemented smooth.

Platforms to be so built as to prevent the swill from being spilled on the ground.

After each feeding the platform to

be swept and disinfected with a solution of cresol, 4 parts to 100 parts of water. If desired this washing solution may be added to the swill.

Swill to be collected in metal containers and to be kept in such until fed; no swill to be kept longer than 12 hours, after being brought to the pen. Cans to be fitted with tight fitting tops and to be daily scalded with boiling water or washed out with the disfecting solution.

Surroundings of can to be kept perfectly clean and no spilling of garbage to be allowed.

Feeding platforms to be placed in the middle of pen or at least 10 feet from the fence.

Under no circumstances is the swill to be fed on the ground or in wooden troughs.

3—Specifications for Stables.

All manure to be daily removed and kept in barrels or covered bins so as to exclude flies. If the manure is desired for fertilizer by the owner of the animals it must be immediately strewn and not piled.

Before removing the manure from the stable it must be sprinkled liberally with a solution of borax, 1 lb. to 10 gallons of water.

Horse lots or places where horses are tied must be cleaned up daily and the manure sprinkled with the borax solution.

The same procedure for cow stalls and cow lots as for stables.

4—Dairies.

These must be kept scrupulously clean; all utensils must be cleansed with boiling water and washing soda and afterwards rinsed with plain boiling water. If the dairy is equipped with separators or similar apparatus these must be kept scrupulously clean.

Milking sheds must have concrete floors and drains. This floor must be cleaned daily of manure and urine and washed with some approved form of disinfectant. This shed washing must not be allowed to collect in puddles in the yard.

5—Water Barrels.

All barrels or other containers for catching rain water must be made mosquito proof by covering the top with wire screening.

6—Chicken Houses.

Must be kept clean and free from chicken droppings.

Roosts and nests must be frequently disinfected and if the latter contains hay or straw these must be changed after each setting and the compartment disinfected before fresh straw is put in.

The houses must be whitewashed at least once each month.

7—Premises in General.

These must be kept cleaned at all times; tin cans must be burned and mashed or buried; all trash must be promptly burned and not allowed to blow around the premises or collect in piles. Ditches and drains must be kept open and free of grass or other growth. Kitchen swill or garbage must not be thrown on the ground; it must be burned or fed to swine after being collected in metal receptacles.

These receptacles must be emptied daily and kept clean.

Notes: The borax solution specified in the above regulations has not been found effective. A solution of copperas (ferrous sulphate) 1 lb. to a gallon of water is better.

There are no specifications for care of water supplies, as they vary too much with different supplies, but the

usual methods of care and treatment were required; and the importance of proper care was explained and emphasized in each case.

This paper is folded in three folds and on the back of the middle fold is written:

.....Ga.
.....1917
Mr.

At an inspection of your premises made this date the following defects were found to exist:

For the correction of these, attention is called to paragraph on the back of this blank.

Under the laws of Georgia you are informed that you are maintaining a sanitary nuisance and you are hereby directed to correct the defect within a period of one week or undergo the penalty of the law.

.....
.....
Inspector.

Make this in duplicate hand one to the person interested and keep one for file in the office.

If adequate laws are passed, avoiding technicalities that would delay or prevent prosecution and enforcement, and the citizens are educated and advised by their physicians and health officers as to the advantages of proper sanitation, there is no reason why these or similar regulations should not be enforced in our towns and rural districts at least with some degree of effectiveness.

The writer has had experience in the sanitary inspection of a number of small towns and rural districts, and in enforcing the above regulations. At first he found difficulty principally on account of the ignorance of the property holders, and the fact that none of them had been informed as to the dangers of careless sanitation, the

proper care of water supplies and disposal of waste products, nor as to the breeding of flies and mosquitoes. As soon as their premises has been sanitized, they were convinced of the benefits and comforts derived; and most of them expressed appreciation of the instruction and information given them.

To effect such a radical change of spirit and mode of living among our rural citizens they must be educated more thoroughly in matters of sanitation. Our boards of health must be permitted to exercise their full function not only in cities but in the country; our physicians, as officers of the public health, should set the example by proper sanitation of their property; and our legislatures should have their attention directed to the necessity for ample provision for rural sanitation. This can only be accomplished by the education of the general public, not only by bulletins, but by personal instruction and demonstration.

DISCUSSION OF PAPERS IN SYM- POSIUM ON MILITARY MED- CINE AND SURGERY.

Major G. A. Dillinger, Camp Hancock.

I want to say that I owe you an apology, and you are really missing a treat in not having Col. King with you, our chief of staff, to address you this morning. He has put "the pep" into our division at Camp Hancock. He is a human dynamite, and all he knows is military tactics and discipline. I feel it would do you doctors good to come in contact with a personality like Col. King's.

The first that I know of one of my family being drafted was when I was drafted yesterday to come here and

address you folks. I have not been able to make any preparation.

I want to say to you that I feel just as much a Southerner as any one of you here, for I have a nineteen-year-old daughter born in Texas who claps just as loudly as any one when Dixie is being played. (Applause.)

I do not know of anything that would interest you more, if you have been following the records at all of our division, our medical records, than the health of our camp. To the wonderful Georgia climate, its water and soil, is the credit due. At the same time I feel in the person of our chief officer, who returned just a short time before he came into our camp, being a national guard officer) is the credit for our freedom from illness, due to his rigid enforcement of strict inspection, when a case of meningitis or diphtheria or measles or anything else occurred. We found in a squad it was inspection, inspection, and then a recheck on those inspections, until we have made up our minds that we have made a test that we could do without—quarantine and rigid inspection. In otherwords, if we have a case of measles in a tent of eight men we do not think it necessary to move those eight away from the camp or the tent, but by rigid inspection of those eight men we pick out the next man, and of course we send the sick man to the hospital as soon as he becomes ill, but we do not think it necessary to isolate that camp or that company.

We have had smallpox, diphtheria, German measles, pneumonia, etc.; only two cases of typhoid fever, strange to say both due to inoculation, and we have been running thirty-five thousand troops in the camp. The first two and a half months we had two deaths due to accident, seven cases of meningitis, etc. Most of them were traumatisms from fire arms, motor eyeles,

and some horse accidents. We feel we have had a remarkable record when you consider all the horses and mules, a lot of careless accidents and all, that we have only had 55 deaths in the whole division. Most of our officers are above thirty, men who have had from five to ten years in the practice of medicine; up-to-date, hard-working general practitioners and surgeons who have brought into their military life now the hard commonsense that one learns, I believe, from the hard knocks of the every-day country practitioner. (Applause.)

Since beginning the practice of medicine I have spent some years in Europe, I was quarantine officer in Galveston, Texas, etc., but I want to tell you that a man, practicing eight to ten years in the country, who runs up against a serious case of obstetrics, or a fracture, or anything else, has to get that thing fixed up, and, by George! the average country boy will get that case fixed himself. When he wants to go to town he will knock the bed off a wagon and fix up a vehicle, where if he were a town boy it would take ten to twelve boys to lift that thing off. It is the patriotism and experience that has to do with our healthy camp.

As to infectious diseases: For fifteen years I have been living in Pittsburg and have had much to do with the health life there, and in the crowded districts, among the very poor, etc., we cannot advance too many radical ideas as to quarantine. You have got to be rigid and severe, but in our camp it is a matter of inspection, practically, only. You have got to be on the job all the time.

A few weeks ago I was called up one night. A fellow had been sent to the hospital and Major Borrow called me up and said we had a case of smallpox in the southwest part of the camp among a bunch of mechanics. These

mechanics are picked up all over the United States, with green, raw officers, and they are shipped there for mobilization purposes. As soon as one regiment is formed it is shipped to Europe, then the next one, and so on. Most of those men coming from the camps had been vaccinated, practically all of them. The fellow that developed the case came from Michigan, thought he was not recruited there. They would not take him and he enlisted elsewhere and was shipped to Camp Hancock. We sent forty doctors into that camp and in two days we had revaccinated 4,800 men! We took no chances even with the Colonels, and some had some very good scars on their arms. That was the only case of smallpox we had. That is what we mean by rigid inspection.

I believe the time is very short when every medical man and woman in the country is going to have to give his or her services to the country. As far as we can see (and I have been much with general army officers and have some confidence in their ideas), this is not going to be a matter of two or three or four years or possibly more. When Kitchner said it would be three years we all thought he was crazy. It was we who were crazy not Kitchner. It is going to be a question of exhausting the resources of the German empire, not their men. They will have enough men to continue the war for twenty years. It is going to be a question of exhausting every one of Germany's resources before this war is over, and that is going to be some picnic. Every man physically fit is going to have to enlist in the service before it is through—allopath, homeopath, or what not; and there is not a man who will not have to make a sacrifice from the day he leaves his home. That is all war is, and I want to see every medical man, when the time

comes, jump into the harness. I have never worked as hard in twenty-five years as since I have been working at Camp Hancock. I have made more in a day (not every day, but some days) than I am making at Fort Hancock. But it is work, and it is the physician who looks after the soldiers, because the commanding officer in no good for this.

It is hard for some of the major surgeons to get away from their private practice ideas. I believe the surgeon's idea is to supply the commander with physically fit troops. We are not there to pamper every malingerer who says he has a pain in his back. You want to be sure a man has not got a pain in his back, and when he has not, make him work. You have to get them fit to kill Germans, and until you get that spirit (and I believe America has got it) you will not grasp what being a soldier means, for if you don't kill him, he will kill you.

I heard Capt. Baker make the statement that there are only two kinds of men in the trenches—quiet men and dead men. Did you notice him put that gas mask on? He wasn't more than three and a half seconds. Six seconds you have to get it on in, and if it is not on in that time you are headed for Kingdom-Come.

I know I have talked longer than I intended. If there are any questions that you wish to ask that I can answer, I shall be glad to do so,—anything pertaining to camp sanitation, or anything that I can do.

I am mighty glad to be over here just to meet you folks and see the class of men you have and the great work you are doing here, and when the time comes I hope, (as I know you will,) that you will get into this thing, for, in my opinion, every man, woman and child is going to have to work for Uncle Sam, for we cannot sit home

under the tree and say, "The boys are doing their bit." We have all got to do our bit. (Applause.)

DR. W. P. PORCHER, CHARLESTON.

I just want to call your attention to the fact that there has been recently announced as a new thing that the germs of spinal meningitis were absorbed through the throat and nose. For several years past it has been quite custom to speak of the diseases of the throat and nose in rather a disparaging way. We all know there are only two ways by which the disease can be absorbed in the system—by inoculation or by inhalation. We had a very sad case in Charleston recently—a physician—the picture of health. He had never seen a case, never attended a case of spinal meningitis, but he had a chauffeur who was apparently a carrier of the disease. He did not have the disease but was just a carrier. This doctor was taken with the disease and died in three days. He did not have a closed ear and it is believed that he absorbed this disease from his chauffeur. We never have had a more striking illustration that this unfortunate doctor absorbed this disease through the throat and nose.

We find by taking cultures from the throat and nose that many diseases are absorbed in that way, and are stopped by autogenous vaccines in the throat and nose. We have learned how necessary it is that the throat and nose should be examined.

DR. KOLLOCK.

Last summer there was a meeting in Charleston, consisting of many of the gentlemen present, as well as others. We had been asked by the Governor to nominate men in the different counties

who should act upon the exemption boards, and while I was quite busy suggesting men (I don't know that it is quite safe for me to admit that I was on that board, because it is a pretty dangerous thing now) a friend surreptitiously got me on the Charleston board. He said, "You are just the man for it. You are respectable;"—even though I was one of those specialists just referred to by Dr. Poreher. Any one who has served on the exemption board knows what a job that is—a never ending one, because those men going to the war I think are on there for life, because as soon as the war is over I believe the Government is going to give them something else to do. So I was put on this board (I am not on there now), and I can see now what help these advisory boards were. There was no court to which we could refer these doubtful cases. Having practiced for many years on the ear, throat and nose, I had to get down and become a specialist on kidney and other troubles, and I had to dig up my books and diagnose and study about the different murmurs. The heart murmurs troubled me the most.

I passed upon these men, and but

few of them, I am glad to say, were returned from the camps.

One of the chief troubles for which I turned down men (only because the requirements required it), was for defective teeth. They didn't have two molars on each side—one above and one below—in good condition. How many of these men could be put into good condition by dentists I didn't know; so after turning down a few of them I came to the conclusion it was a mistake, because I knew there were dentists at the camps; so I sent these men to the camps.

It seemed a bad precedent that the country should be deprived of strong, good men simply for a temporary trouble; therefore I passed those men, and I don't think a single one has come back on account of his teeth not being in good condition.

Another thing that puzzled me was there were some below weight in good condition. One thing that I noticed was that hemorrhoids were extremely rare.

Another thing I would like to say concerning those men that were examined; I do not remember having a single case of the men that I explained that I thought was a malingerer.

MINUTES

IN MEMORIAM.

S. C. Baker, M. D.

By A. E. Baker, M. D.

One year ago today Dr. S. C. Baker, an honored Fellow and Ex-President, met with us in perfect health and vigor, in the prime of manhood, and participated in the proceedings throughout the entire meeting.

No man enjoyed a more honorable career; no one had a brighter prospect for years of usefulness. Much earlier than is customary in our profession he had attained to positions of honor; he was a recognized leader among us, enjoyed the respect of his professional brethren in a remarkable degree and possessed a large and devoted clientele.

He was among the first in the State to enjoy the distinction of owning and conducting a private hospital for his own patients. He kept in close touch with the medical centers of this country by making yearly visits, therefore at all times conversant with the most recent advancement in the science of medicine and surgery.

In his surgical work he was governed at all times by that sound and deliberate judgment which guarantees conservatism. As a practitioner he was adequately equipped for popularity and success, he was sincere and earnest, winning at all times the confidence and appreciation of those who entrusted themselves to his care. No one could be thrown with him without realizing his honorable nature and generous unselfish disposition. He loved his work and gave all of his time to it.

In his daily life he was temperate in habit, polite in manners and chaste in conversation. He had a high moral character, which inspired and controlled his daily life. He was gentle, kind and unselfish in all his relations in life.

To follow the advice of Locke who said that the "Actions of men are the best interpreters of their thoughts." To interpret one's thoughts is to interpret one's character. If we are to interpret Dr. Baker's character by his actions we are at once impressed that he was a man of great character, for he was a man of great deeds. He acted openly before the world and he realized that, fundamentally, all actions relating to the common good is, and of right ought to be public.

Sophocles said, "Heaven never helps the man who will not act." The activities of Dr. Baker certainly entitled him to large benefactions from heaven.

Carlyle justly observed, that "No man is born without ambitious worldly desires," and our deceased friend has his full share of ambition, that ambition which has no rest. He seemed daily to illustrate the declaration of Scott that, "One crowded hour of glorious life is worth an age without a name." I may say that "he lived intensely, and living thus, he lived, not long, but much," he lived in deeds, thoughts, feelings and heart throbs taking little account of years. In the intensity of his life he erected a monument of Majestic Good which time cannot obliterate.

To those here assembled he was much more than I have described. He was our colleague and fellow, a leader

among us, respected, trusted and beloved.

"The Statesman and Soldier leaves his monument in bronze or stone, the man of wealth in the colossal fortune that perpetuates his name, the author and poet in pages of thought and songs that live." But our deceased friend who has joined the silent majority, and whose memory we will cherish and honor has a thousand monuments in the hearts of those who knew him and appreciated his generous character.

Minutes of House of Delegates continued, April 16 17 and 18th, 1918.

.. REPORT OF COUNCILORS. ..

Report by Dr. A. E. Baker.

THE PRESIDENT: Gentlemen, you have heard the eloquent and just tribute to our deceased member. What shall we do with these resolutions?

DR. NEUFFER: I move that we adopt the tribute by a rising vote of the delegates.

Motion carried by all members standing.

SECOND DISTRICT:

Report read by Dr. Matthews.
Denmark, S. C., 4-15-18.

Dr. F. H. McLeod, Pres.

I beg leave to submit the following report as counsellor of 2nd district.

During the past year there was held one district meeting at Bamberg, this being fairly well attended. I visited most of the county societies during the year and find that there is a general lowness in work done as well as small attendance at the meeting.

J. S. MATTHEWS,
Councillor 2nd Dist.

DR. BAKER: In my report as Chairman, I will be pleased if the house will consider that recommendation in regard to the illegal practitioners. We have five counties, Berkley, Buford, Colleton, Charleston and Dorchester. I regret to report that the physicians in Berkley and Buford are not organized. They are so widely separated it is difficult to get together for organization. I have made repeated efforts to stimulate the spirit of co-operation among them but have failed. I feel they would respond if conditions were different. Colleton and Dorchester are organized and doing fairly well, having scientific meetings nearly every month.

Charleston Medical Society is in fine condition, holding two meetings every month. The best of harmony and co-operation exists throughout its membership. We have 18 of our members at the front and expecting others to go soon. I regret to announce that we have, since January, lost two members—most untimely deaths occurring—Dr. Whaley and Dr. Boykin.

The district meeting is held twice a year, with good attendance and good scientific work done. This year we are planning a trip to Jacksonville, expecting to have the scientific meeting on the boat en route to Jacksonville, not expecting to be in a condition to hold a meeting on our return.

There are only two illegal practitioners in this district. They have been before the examiners more than once. I have not had any reports of any friction among the members.

THE SECRETARY: Since the report of the Committee on Credentials the Florence report has come in, and Dr. R. M. Graham is the accredited member. I move that he be seated.

Motion carried.

THIRD DISTRICT.

Report read by Dr. T. L. W. Bailey.
Clinton, S. C., April 15, 1918.

COUNCILLOR OF THIRD DISTRICT
Gentlemen: REPORT.

I hereby make report as Councillor of Third District. Comprising Counties of Abbeville, Greenwood, Laurens, McCombiek and Newberry.

I believe we are making our same rank in the Association as formerly. Our Societies have done efficient work during the year. Of course the interest from regular meetings with all the societies have been more or less compromised on account of what the government expected us to do for the promotion of war work. I believe no class of men, professional or others, have more willingly entered into the help of the service than the Doctors of our State. We have four from Laurens County in the Medical Reserve Corps, all volunteers. Others in my district may not be reported to me. The home physician over the districts, many of them have been assigned to the various work to do, such as acting on examining board, speaking for the Red Cross and Liberty Bonds, etc., all this work has been entered into with a spirit of fervent patriotism.

There was one case of illegal practice reported to the Councillor in Laurens County. The complaint was discussed before the County Society and referred to the Board of Councillors for advice.

The Laurens County Society is keeping the membership continued of the members who were in good standing before going to the front, and we heartily recommend that every society in the State do likewise. "Let's keep the Home fires burning for the boys."

Respectfully submitted,
T. L. W. Bailey.

FOURTH DISTRICT.

THE SECRETARY: I have a letter from Dr. Berry, and he has not sent his report. Says please don't elect him any more. That is all the report he gave me.

THE PRESIDENT: The name of Dr. M. R. Mobley has been handed in entitling Florence County to two delegates. Dr. Mobley is in Florence.

DR. GAMBRELL: If Florence County has another delegate I move that he be seated as a delegate. They are entitled to two delegates.

Motion carried.

FIFTH DISTRICT.

April 15th, 1918.
REPORT OF FIFTH DISTRICT.

Mr. President:

The County Medical Societies of the Fifth District are badly affected by the loss of young men who have been called to the colors. York County has lost her best man, Dr. Pressley, whose place cannot be taken by any other man in the County.

The most important question before the District is the condition at Winthrop College. We have had more or less trouble there for some years. Dr. Johnson persists in employing a Doctor who has no State license. He seems to ignore the law in this respect. I did not take up the matter of the last doctor until the State Board met and she failed to pass. I then at once took the matter up with Dr. Johnson. He said that Governor Manning and Dr. Boozer assured him that she could go right on and practice. I did not see how Governor Manning or Dr. Boozer could give her the right to practice medicine in this State without a license. She failed in three branches. She came over to see me as your Councillor, and brought her ere-

dentials. Her literary training was fine.

Dr. Johnson has great trouble in getting a doctor. The pay is very poor, the work is hard, and the doctor ranks in the College about as a matron. Dr. Allen assured me that she would leave if I so advised, but I decided I would leave it to the House of Delegates, so the matter stands.

I realize I have not had grit enough to do my duty. All doctors who have failed to pass in the District have been required to stop practice until they pass the State Board, except Dr. Allen.

Respectfully,
Miles J. Walker.

DR. BOOZER: Mr. President, and gentlemen: It seems from that report a word from me would be in order. I am a little surprised that I had the right to give Dr. Walker the right to practice in South Carolina. I am sorry I did not bring with me the files of my correspondence with Dr. Johnson. I would be very glad to read it to the Association, who would see hear from any one. I had the warrant that what I told Dr. Johnson was just the opposite of that report. I feel that the House of Delegates know me well enough to know what I stand for in the practice of medicine in South Carolina. Mr. Johnson wrote me some time ago asking if I knew of a list of doctors who would be suitable to practice in his college; that he had trouble in getting one to practice in his college, and if I had two or three names to please furnish them to him. I then looked over the files carefully and found some one that I thought would be a good physician for him and so wrote him, first seeing the party to find out if her services were available, and he could have gotten a most efficient practitioner in South Carolina.

I did not hear further from him until he wrote that he had in prospect a doctor that had a diploma from the University School of Medicine in Boston, and wanted to know if we wouldn't grant her license on her diploma. I wrote him it would be impossible. That the law distinctly stated we could only grant license by examination, unless it was a question of reciprocity, and he wanted to know if we could not grant reciprocity. I wrote him distinctly no, that Massachusetts reciprocated with no State, and the only way to grant license to a doctor to practice would be to pass the State Board. She did pass on several branches, and I do not now remember how many she failed on.

Dr. Johnson may have gotten the impression from the Board that the Board has always taken with illegal practitioners, that they never prosecute, because they may be called upon to act as judges of the case. It is, therefore, impossible for them to prosecute any one. The law simply says they shall examine and pass upon the qualifications of doctors, and the Board has never taken the position of prosecuting any one who practiced illegally, because they may be called upon to sit in judgment upon them.

This places me in a rather unfair light, but I am sure you know me and know the Board well enough to know that we did not take it upon ourselves to grant license to any illegal practitioner.

THE PRESIDENT: You have heard Dr. Walker's request for advice and Dr. Boozer's statement. What is the pleasure of the house?

The problem of dealing with illegal practitioners has been a very serious one with us. We have not been able to secure convictions in our part of the State. There seems to be always

some circumstances that the illegal practitioner can bring to bear on his patients to create enough sympathy to prevent a conviction before a jury. Is there any resolution or any action you wish to take on Dr. Walker's request?

DR. TIMMERMAN: I think it would be wise to have the reports of all the councillors, then take whatever action we see fit afterward.

SIXTH DISTRICT

REPORT OF SIXTH DISTRICT.

Mr. President: I regret to report that I have not made official visits to my County Societies, on account of being absent from the State until the last 4 or 5 days, but from what I have been able to learn the medical societies are in a fairly good condition, and harmony and good fellowship prevails throughout the district. There has been for a long time some trouble in my home county over the fact that one or two men who have never passed the State Board of Medical Examiners have been and are practicing medicine today in that county. One of the men is an undergraduate and continues the practice of medicine in spite of the fact I have repeatedly brought him into the courts without convictions. No illegal practitioners, have been reported to me from any other county during past twelve months. Quite a number of the men from my district are now serving in the army which is somewhat responsible for the few attendance at our meetings. On the whole, while there has been some lagging I think interest is largely on the increase throughout my district.

This matter of illegal practitioners was pretty thoroughly discussed last evening, and no one could decide what it was best to do. I would be glad to issue in my name, and later in the

name of the President, and with the same result. This man is an undergraduate.

All of which is respectfully submitted,

William S. Lynch,
Councillor 6th District.
Scranton, S. C. April 15, 1918.

THE PRESIDENT: We will refer again to Dr. Walker's request for advice concerning the illegal practitioner at Winthrop College.

DR. LANCASTER: I have a suggestion to make along this line. It seems it is a matter of law, and my suggestion would be that the councillors of the various districts go before a judge and get an injunction in each case. That is the way I would do if I were a councillor. I think it is the proper course to pursue. It is a matter of law.

DR. WYMAN: I am rather surprised that this has not settled itself before the Harrison Act. An illegal practitioner cannot use dope. That would be an easy way to help it. Let the councillor report to the inspector. Probably that would help the matter.

DR. NEUFFER: I wish to endorse the suggestion made by Dr. Lancaster. The matter of indicting an illegal practitioner has failed, but I do know that the injunction has worked successfully. He has stopped them from practicing and they have not been able to resume their practice.

The point made by Dr. Wyman is one I have thought of a little and looked into some, but I have found that the Collector's office pays little attention to whether a man has a diploma or not. When the would-be practitioner signs an application they simply send in his permit and pay no more attention to it.

Now in addition to the suggestion made by Dr. Lancaster, I would like

to ask if it is feasible for this body to elect or employ a solicitor and provide the necessary funds to pay him, and have this attorney at the disposal of, say, the Chairman of the Board of Councillors or the President of the Association, as we may determine, so that when there is a case of illegal practitioner reported, it will be some one's duty to bring the necessary injunction? Probably the Secretary-Treasurer could tell us whether we are in a position to make an appropriation for this purpose. Let the Board of Councillors select him, or the President. You have to get the Attorney General's consent, because the injunction has to be brought in the name of the State. We have had attorney generals refuse that injunction, and we have had others to grant it. So if this plan is determined on we will have to find out if he is in sympathy with this injunction proceeding. It is best to have somebody responsible for seeing that the proceedings are brought.

DR. WATSON: It seems to me we could hardly expect the average juror to convict a man or woman for the illegal practice of medicine when one of the highest educational institutions in the State flagrantly and willfully violate a statute law. Now if Winthrop College is immune from the statutes why should not the poor, ignorant, average juror ignore the same? So it seems to me it would be wise for the House of Delegates to stamp with disapproval the act of President D. B. Johnson. There are a thousand or more young ladies at the college who are absolutely under the care of Dr. Allen, I believe is her name.

The Board of Examiners of South Carolina have said she is not competent to look after the illnesses of these

young ladies; so it seems to me the proper thing is for the House of Delegates to bring to the authorities the fact that the statutes is being violated. It seems that the Law is more respected in the breach than in the observance. We cannot expect anything better if one of the higher institutions of learning is immune for the same thing.

DR. BARRON: It seems we have a greater danger from some with lieenses. These quacks are smart enough and there were enough to get licenses and are flaunting in the papers what they can do, and these poor humans are being fleeced out of their money and it is our duty to try to proteet them. It is the duty of every man to try to suppress these, rather suppress those who are not quite smart enough to get a license.

DR. EDGERTON: Dr. Walker stated this lady said she would leave if he told her to. I think it would be well for him to tell her to leave, first, before we take any aetion, then eall this letter to the attention of Gov. Manning and see whether some letter could be written from this Society to President Johnson asking him why it is that Winthrop College cannot pay a competent physician enough money to secure one to look after the physieal ills of the students of that institution, and asking him why he didn't get a licensed physieian when he had a perfect opportunity to do so. It was probably because he wouldn't pay for it. I would suggest that we tell Dr. Walker to request this lady to give up her position and that the letter be written by the Seeretary-Treasurer to Gov. Manning and one to Mr. Johnston on the same lines.

DR. SAUNDERS: The suggestion has been made of getting the outside

man to prosecute these cases. They go before the grand jury and are the most professional criers before the jury you ever saw, and they always cite some case where the physician who has sworn out the warrant is doing so from personal spite, and we have been unable to convict them before the grand jury, much less before the petit jury. If we could get a state or Federal authority to prosecute these cases probably he could get them before the petit jury. We have never been able to get them before the grand jury at all. It would have to come as a concentrated effort of the State Society rather than the County Society. I feel it would be better to get some way where one could prosecute them all over the State, and it would not be a question of one of us.

DR. TIMMERMAN: What is the motion?

DR. EDGERTON: The motion was that we ask Dr. Walker to request this lady to give up her present position; that a letter be written to Gov. Manning calling his attention to Mr. Johnson giving her permission to practice, without her having any right to do so; that a letter be written to Mr. Johnson calling his attention to the fact that this lady will have to have a license to practice in a representative institution such as he is trying to run. I think it should be brought to the attention of the public through the daily press. I think the editorial writers on the two papers in Columbia would be very glad to have a few words to say about it. They are for the upkeep of the community.

DR. TALLY TAYLOR: I would add to that that so far as the Secretary of the Board of Medical Examiners giving him authority to employ an unlicensed physician is concerned, that is entirely incorrect.

DR. TIMMERMAN: I have been burdened with dealing with a large number of illegal practitioners. It is very easy to say that you can go and get an injunction; that you should do it. The various physicians who practice illegally may, and do practice under different circumstances, but my efforts to indict illegal practitioners have embraced the employment of some of the best legal talent, and they state you cannot get an injunction unless you are prepared to prove he is a nuisance. If you can furnish the proof you can get the injunction. If not, you will not get the injunction. If that be the case, where would you stand? It is easy to talk about how it might be done, but does it work? If you cannot do it how can you bring the injunction? You have got to furnish the proof. You get one of those men in the back woods, (and they usually stay there. They are not in the populous districts, as a rule), and even in the more populous districts they are generally associated with some other physician who claims he is "studying under me," and they make that plea and how are you going to meet it? I take it that it would be a wise thing to adopt some method by which these men who are residents of this State, who have been here practically all their lives, and have been engaged in the practice of medicine for a number of years, could be eliminated. But with the number of physicians going to the war service, and the shortage of physicians in the rural districts, you will have one of the hardest times trying to get rid of them. If you could get the co-operation of the older men it would help.

DR. WATSON: Do you mean the Medical Examiners to sign their names to a fact that he was competent, after he had failed repeatedly?

DR. TIMMERMAN: I have not recommended any concession. I do not mean for any physician on the State Examining Board to perjure himself.

DR. WATSON: What concession would you recommend?

DR. TIMMERMAN: Some of those men who cannot pass a satisfactory examination are pretty good men otherwise. By their continued association with other physicians they gain a certain knowledge. Numbers of them would fail, and their educational qualifications are not as good as they should be. You know how easy it is when you get out of college for you to stand an examination.

DR. TAYLOR: Is there no law to prevent these men from practicing obstetrics?

DR. TIMMERMAN: There is not.

DR. TAYLOR: These men who have tried fifteen to twenty times and failed, do you think we should make midwives out of them?

DR. TIMMERMAN: I think they are better than the majority of ignorant women who do practice it.

DR. CARPENTER: What is the practice of the State Board in admitting applicants to oral examination?

DR. WYMAN: The custom is we do grant older applicants oral examinations very frequently, to help them out, but my experience has been, and I think that of others, that they make a poorer showing that way than in taking a written examination. Our rule is to give those older men an oral examination on the minor branches, and written on the major branches; so we mix it up from one to the other and make the examination.

DR. CARPENTER: It occurs to me there are, perhaps, a dozen men practicing medicine in the State today who have been practicing fifteen years or more, who have gone to Col-

lege two years, who are really illegal practitioners. Those men failed to register under the law that a man practicing five years might get license. The rural communities have suffered during the draft. I venture to say that many of you know communities that have one or two physicians now where there were three or four previously. From the fact that they have practiced five years and attended college two years, it would seem that they might pass. I think several physicians can be gotten into the fold under an arrangement of that kind.

DR. NEUFFER: Lawyers as well as doctors differ in opinion, and I would further state that there have been injunctions secured against illegal practitioners.

DR. TIMMERMAN: How many?

DR. NEUFFER: I will cite you one, without proving the man as a nuisance, but simply proving the cold fact that they were practicing medicine.

Now, Dr. Carpenter, speaking about letting the gap down and all that, that would be a very bad precedent to establish, even though we are at war, and I do not think we have got anything to do with that. He would still be an illegal practitioner. Again, we are discussing a matter referred to by the Board of Councilors more particularly than we are the concrete case mentioned by Dr. Walker; and the Board of Councilors are asking for instructions how to deal with illegal practitioners throughout the State. Therefore I move that the delegates appropriate \$500 from the Association funds, to be placed at the disposal of the Councilors, they to select an attorney to prosecute or secure injunctions against all illegal practitioners known

to them. We want one man as the Association attorney.

THE PRESIDENT: Gentlemen, you have heard the substitute for the original motion and its amendment.

DR. TIMMERMAN: There is something they ought to take into consideration before they pass that: The possibility of the membership holding up to where it is possible to maintain the Association; the lessening of the amount of cash you have got, and the possibility of having a depleted treasury. I stand for the enforcement of all laws and of the Medical Practitioner Act, particularly, but five hundred dollars will not eliminate them, and it is well, before passing this, to consider whether or not you can afford that expense, and if you have a deficit how are you going to meet it? There is a less amount in the treasury than there was a year ago, and a year hence there will be less still.

DR. TRIPP: Dr. Neuffer's resolution should embody the resolution how to raise that money. It strikes me if an illegal practitioner in each Councilor's district is annoying some fellow and getting his practice, he ought to notify his councilor; then, if that district is loyal enough they will appropriate enough and see that that man gets it. When a man applies for renewed license and has not got a distinct license, he is convicted, and the Judge has nothing to do but to fine him. If his prescriptions are in the drug store and he has administered and accepted fees for it, you have the evidence, and it ought to be an easy matter to convict a man. Whether the Judge would be harsh enough to put the maximum fine is a question and always will be. But to trust young ladies from all over South Carolina to Dr. Johnson's care, to be looked after by one of the cheapest doctors that could be gotten is a shame. If the

State is deficient maybe Dr. Johnson is doing the best he can; but if the State puts up the money maybe Dr. Johnson will secure a competent doctor.

DR. STOKES: Most of these illegal practitioners are men for whom the profession is responsible—men admitted to the medical college before they had any qualifications for entering, and they have fallen down because they did not have the capacity to take this examination before the State Examining Boards, and if we would suggest to the Board of Examiners that they give these men examinations on the installment plan, I think it would be well. The men have come up and shown themselves willing to try. If they would examine them in one or two branches at a time it would encourage them. We need the men, and as long as we let them practice without license we are going to have them doing it. It creates sympathy for a man and gives him a great advantage to bring him before a jury. It is the best advertisement he could have; and if we would examine these men in, say, two branches at a time until they do pass, that would not lower the standard. We cannot stop them by indictment. I know three members who are not members of the Society who have their diplomas but cannot pass examination. I would not care to risk it myself. In addition to his practice he must pass upon the entire curriculum,—everything! It seems it is requiring a good bit. Admit him to a medical college and give him no requirements and now to require everything!

From this time on the medical colleges will weed the men out, but the men practicing now illegally are men we have to deal with. I know of many instances where the medical college graduates have left their practices without a physician, and if we could

adopt some constructive method—encourage them—it would open their eyes to the dignity of being physicians.

DR. WATSON: We have tried the instalment plan. We have tried every plan that human ingenuity has devised. They can come and stand one examination each year, and they can take eight years if they want to. What can one do?

Question: Do they notify that man six months in advance that he can come and stand examination in a particular branch?

DR. WATSON: He has the right to come and stand on any branch that he wants to.

DR. TRIPP: There are men who have attended medical colleges for one or two years only. You cannot examine a man when he has no diploma.

DR. WYMAN: We are just beating around the bush. Either annul the law or keep it. We have the Attorney General behind us.

DR. HINES: Is this on the substitute motion?

THE PRESIDENT: Dr. Neuffer's motion, the substitute.

THE TREASURER: For the prosecution of illegal practitioners there is \$145.35 in the treasury. It was mentioned at the end of the report and I overlooked reading it. That money is available any time and has been for years. Up to today I do not think we have collected more than \$1,000 from all sources for the State Association, when every year, up to this time, we have at least \$1,500. I believe that the funds this year are going to fall short at least \$500. It looks so now. Although we have been collecting yearly \$2,000, I do not believe we are going to collect more than \$1,500. Many Associations have had to increase their dues from \$5 to \$8 to \$10. Just at

present we are breaking even, so far as our funds are concerned.

DR. NEUFFER: If you will allow me to change the wording of my motion a little. We have already \$145 that can be used for nothing but the prosecution of illegal practitioners. I would like to add that this fund be added to by an amount from the general fund of the Association to the amount of \$500 if necessary.

THE PRESIDENT: Is this change accepted?

Answer: Yes, sir.

THE PRESIDENT: As many as favor the substitute motion of Dr. Neuffer to appropriate \$500, or as much thereof as may be necessary to employ competent counsel to prosecute illegal practitioners, make it known by standing.

"Yes," 18.

"No," 12.

DR. WYMAN: I move that we ask the aid of the Federal authorities in carrying out this resolution, which can be gotten without spending any of this \$500.

Motion carried.

DR. EDGERTON: I move that this body write a letter to President Johnson; that Governor Maning be written to, also; that we request that lady to leave.

DR. TIMMERMAN: I move to strike out Dr. Johnson or to the resignation of the lady.

DR. HARMON: I would suggest that the Trustees' attention be called to this matter. We are the tax-payers, and the Trustees are the proper men to have their attention called to it. I move that we call the attention of the Trustees and not through any one else, but through this body,—the Trustees of this College.

Motion seconded and carried.

DR. WYMAN: I just want to an-

nounce to the House of Delegates that we are going to have a smoker to-night at 9:30 for the House of Delegates and all of the members of the Association and their guests. Aiken is patriotic and we are going to Hooverize, so you must not expect too much.

We want you to go and see the hospital.

Adjournment to meet at 3:00 P. M.

(To be continued.)

ANDERSON. REPORT OF WAR COMMITTEE.

The Anderson County Medical Society held its regular meeting in the Chamber of Commerce rooms Wednesday, May 1, with an attendance of twenty-five members.

During the business session several important matters were disposed of. It was thought best to hold one meeting each month instead of two as we have done heretofore. Interesting reports from the delegates to the State Medical Association in Aiken were given.

Owing to the pressing need of physicians in the army and the desire of our members to do their part in this great war the scientific program was dispensed with and the time was spent in a general discussion of the subject. Many important facts were brought out. All of our members showed great enthusiasm and expressed a willingness to do their full duty. After a lengthy discussion a committee consisting of the following: Drs. J. R. Young, H. M. Babb, W. R. Haynie, J. O. Sanders, and R. B. Day, was appointed to look over the situation in the county and see just how many physicians could be spared without suffering in the individual communities.

The following physicians from Anderson County are now in the army:

Members of the Society: Drs. H. H. Acker, H. H. Harris, Wade Thompson, H. A. Pruitt, Vernon Kay, C. F. Ross, L. C. Sanders, Daniels, Webb, Weathersbee, E. E. Epting, and J. W. Williams.

Those who have not been registered in the county are Drs. Milford, Grady Clinkseales, S. O. Pruitt, and Elias Cooley, Colored from city—Miller. The applications of Drs. C. H. Young, W. R. Haynie and C. G. Todd are now pending.

The Anderson County Medical Society held a special meeting Wednesday, May 22, for the purpose of hearing the report of the committee appointed at our last regular meeting. The committee submitted the following report:

Mr. President and Gentlemen:

Your committee appointed to study the situation in Anderson County in regard to our furnishing yet more men for the Medical Reserve Corps in answer to the urgent call from the Surgeon Generals' office has met and considered the subject from many sides and would make the following report.

From the best information that we could get, there are now about 21,000 in the army. This is only 15 per cent. of the doctors in the U. S. South Carolina has furnished about 200 which is 15 per cent. of the doctors in the State, Anderson County has already furnished fourteen doctors or 22 per cent. of her entire number. When note is made of the proportion of doctors to population in this county and State as compared to that of other sections of the county our quota becomes more creditable.

United States—One doctor to every 700 people.

South Carolina—One doctor to every 1,200 people.

Anderson County—One doctor to every 1,400 people.

Anderson County since the war began—One doctor to every 1,800 people.

The call from the Surgeon general's office has been for twenty per cent. of the doctors and as we have said, Anderson County has already subscribed her quota. But with plans of the war department fast maturing for putting an army of 3,000,000 to 5,000,000 in the field it will in the very near future be up to us to spare still others of our number. But the question for our discussion is whether or not we can in justice to the people of Anderson County whom we serve spare others of our number to make up the state's quota of the 150 of the 5,000 called by the surgeon general's office by July 1.

To supply 150 more doctors will take about one-seventh of the 1,100 doctors now in the state. Anderson County has 49 doctors now and if she should furnish one-seventh of this number her total quota will be twenty-

one. This is one-third of the 33 per cent. of our number.

Your committee is of the opinion that we can furnish this number without seriously endangering the medical service necessary in any community. We would recommend that we appeal to the public to lend us every assistance in this matter.

From the town of Anderson which has twenty doctors, we think two men could be spared, from Belton one, from Honea Path one, from Iva one, from Starr one, from Pendleton one.

We would recommend that the Society make an effort to have Dr. W. T. Martin, of Pelzer, and Dr. Clarence Milford of the Shirley Store section, both of whom are in the draft age remain. We have not investigated the proper method of making this appeal but we feel that it will be an injustice to the communities where these men live to have them called into service.

This report was adopted by the society after which the meeting was adjourned.

Olga V. Pruitt, Secretary.

BOOK REVIEW

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1917. Cloth. Price, postpaid, 50 cents. Pp. 169. Chicago: American Medical Association, 1918.

This volume contains the reports of the Council which were adopted and authorized for publication during 1917. These Council Reports discuss the articles which were examined and found to be in conflict with the rules for admission to New and Nonofficial Remedies. It also explains why certain preparations, included in the last edition of New and Nonofficial Remedies, have been omitted from the present 1918 edition. Those who wish to be informed in regard to proprietary remedies should have the annual Council Reports in addition to New and Nonofficial Remedies.

NEW AND NONOFFICIAL REMEDIES, 1918, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1918. Cloth. Price, postpaid, \$1. Pp. 452 + 26. Chicago: American Medical Association, 1918.

This book lists and describes the proprietary remedies which the Council on Pharmacy and Chemistry has examined and found to conform to its rules for acceptance and publication in New and Nonofficial Remedies. It also describes the newer nonproprietary and unofficial medicaments which, in the opinion of the Council, give promise of having some real therapeutic value. The description of each article aims to give a statement of its pharmacologic actions, its therapeutic uses, with dosage, the physical and chemical properties, and tests for controlling its identity and purity. Articles of similar composition are grouped together. In most cases each group is preceded by a general article which compares the composition and actions of the members of a group with each other and with the established drugs they are intended to supplant. Those who desire trustworthy information in regard to the newer drugs should have a copy of this annual.

THE SURGICAL CLINICS OF CHICAGO. April, 1918. Volume 2, Number 2, with 80 illustrations. Published Bi-Monthly. W. B. Saunders Company, Philadelphia and London.

Among the interesting articles in this number we note the following:

Clinic of Dr. Albert E. Halstead, St. Luke's

Hospital. The Surgical Treatment of Facial Paralyses.

Clinic of Dr. Roger T. Vaughan, Cook County Hospital. Acute Osteomyelitis of the Sternum: Woody Presternal Phlegmon: Osteotomy and Drainage. Spontaneous Rupture of Ventral Hernia in Old Scar with Protrusion of small Bowel.

Clinic of Dr. Philip H. Kreuscher, Mercy Hospital.

Hallux Valgus. A case of Bow-legs Treated by Open Operation.

Clinic of Dr. James Herbert Mitchell, Rush Medical College. The Extragenital Chancre as a Complication in Minor Surgery.

Clinic of Dr. A. J. Ochsner, Augusta Hospital. Gall-stones: Cholecystotomy Versus Cholecystectomy.

Clinic of Dr. Joseph Brennemann, St. Luke's Hospital. Case of Rat-bite Fever.

MEDICAL CLINICS OF NORTH AMERICA.

Volume 1, Number 4. (The Boston Number, January, 1918.) Octavo of 401 pages, 128 illustrations. Philadelphia and London. W. B. Saunders Company, 1918. Published Bi-Monthly. Price per year. Paper, \$10.00; Cloth, 14.00. W. B. Saunders Company, Philadelphia, London.

Among the interesting articles we note the following:

Clinic of Dr. Elliott P. Joslin, New England Deaconess Hospital. Two Cases of Severe Diabetes. The Treatment of Threatening Diabetic Coma.

Clinic of Dr. John Lovett Morse, Children's Hospital. Empyema in Children: Differential Diagnosis and Treatment.

Clinic of Dr. W. P. Graves, Harvard Medical School. Overian Organotherapy.

Clinic of Dr. Charles J. White, Harvard Medical School. Premature Loss of Hair.

Clinic of Dr. Fritz B. Talbot, Massachusetts General Hospital. Eczema in Childhood.

A TREATISE ON CLINICAL MEDICINE. (Second Edition, Revised). By William Hana Thomson, M. D., LL.D., formerly Professor of Practice of Medical and of Diseases of the Nervous System in the New York University Medical College; Ex-President of the New York Academy of Medicine, etc. Second Edition Revised. Octavo volume of 678 pages. Philadelphia and London: W. B. Saunders Company, 1918. Cloth. \$5.50 net.

THOMPSON.

It is refreshing to find an author who has positive convictions in any department of medicine and who is able to impress the reader that owing to wide experience there is much to justify such a position. The

author of this volume gives as a rule definite lines of treatment which appear to him to have been of most value and worthy of repetition. The book will be of more interest than to the student as a text book.

DIFFERENTIAL DIAGNOSIS. (Volume 2, Second Edition.) *Differential Diagnosis, Presented through an Analysis of 317 cases.* By Richard C. Cabot, M. D., Assistant Professor of Clinical Medicine, Harvard University Medical School, Volume 2, Second Edition. Octavo of 709 pages, 254 illustrations. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$6.00 net.

CABOT.

Dr Cabot is one of the best known authors and practitioners of medicine in this country. His books on Diagnosis perhaps lead all others as authoritative teaching volumes. In this revision new matter has been added on vertigo, shell shock, gall-stone diseases, gall-bladder diseases chronic appendicitis, etc. It will be interesting to many admirers of the author that he is now in France and has been made professor of Medicine at Harvard.

PRINCIPLES OF SURGICAL NURSING. *Principles of Surgical Nursing. A Guide to Modern Surgical Technic.* By Frederick C. Warnshuis, M. D., F. A. C. S., Visiting Surgeon, Butterworth Hospital, Grand Rapids, Michigan, Chief Surgeon, Pere Marquette Railway. Octavo of 277 pages with 255 illustrations. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$2.50 net.

NURSING.

Many of the books on nursing have been written by nurses and this is of course necessarily the case, but we have often wondered why the busy surgeon did not enter the field and write a text book from his own point of view. Dr. Warnshuis has done this most admirably. The illustrations are particularly good.

PRINCIPLES OF HYGIENE. (The New 6 Edition. For Students, Physicians, and Health Officers. By D. H. Bergey, M. D., Assistant Professor of Hygiene and Bacteriology, University of Pennsylvania. Sixth Edition thoroughly revised. Octavo of 543 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$3.50 net.

HYGIENE.

This is the sixth edition since 1901, and represents a considerable revision bringing the whole subject up to 1918. The entire civilized world, owing to the world war, is interested in this subject as never before. The book is standard and may be relied upon.

ANIMAL PARASITES AND HUMAN DISEASE. By Asa C. Chandler, M. S., Ph. D. Instructor in Zoology, Oregon Agricultural College, Corvallis, Oregon. First Thousand. New York, John Wiley & Sons, Inc., London: Chapman & Hall, Limited, 1918.

Every educated individual ought to have a reliable knowledge of Parasitology. The volume under review has been written for this purpose and is a creditable presentation of the whole subject.

MODERN OPERATIVE BONE SURGERY
With Special Reference to the Treatment of Fractures by Charles George Geiger, M. D., with 120 Illustrations. Philadelphia, F. A. Davis Company, Publishers, English Depot, Stanley Phillips, London, 1918. Price \$3.00 net.

BONE SURGERY.

Bone surgery has advanced with rapid strides in recent years. Much of the inspiration has come from the master surgeon, the late John B. Murphy. The author has presented herewith the most attractive book we have seen on the subject. The cuts are most excellent. The writer holds strictly to autoplasic bone work.

THE PRACTICE OF PEDIATRICS. (Second Edition, Revised & Reset.) By Charles Gilmore Kerley, M. D., Professor of Diseases of Children, New York Polyclinic Medical School and Hospital. Second edition, revised and reset. Octavo of 913 pages, 136 illustrations, Philadelphia and London: W. B. Saunders Company, 1918. Cloth \$6.50 net.

KERLEY.

The first volume of this work was issued in 1914 and the rapid progress in Pediatrics has necessitated a revision. Twenty-five new articles have been added, sixteen chapters, largely rewritten and much old material deleted. The work is deservedly popular.

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 Paris, Berlin, Vienna, Leipsic, Brussels and
 Geneva.

Volume IV, Twenty-Seventh series, 1917.
 Philadelphia and London, J. B. Lippincott
 Company.

THE SURGICAL CLINICS OF CHICAGO.

Volume I Number 1 (February, 1918).
 Octavo of 226 pages, 73 illustrations,
 Philadelphia and London: W. B. Saunders
 Company. 1918 Published Bi-Monthly.
 Price per year: Paper \$10.00. Cloth
 \$14.00.

Among the articles we note the following:
 Clinic of Dr. E. Wyllis Andrews and Dr.
 Charles Louis Mix, Mercy Hospital. A case
 of Duodenal Ulcer; Its Diagnosis and Treatment.

Clinic of Dr. Arthur Dean Bevan, Presby-
 terian Hospital. A Case of Choledochoplasty
 and the Demonstration of an Overlooked
 Common Duct Stone. Gall-Stone Ileus.
 Ruptured Extra-Uterine Pregnancy—Con-
 fusion With Appendicitis. Benign Structure
 of Rectum—Treatment by Dilatation Under
 Anesthesia and Transplantation of Mucous
 Membrane.

Major Kollogg Speed, A Clinical Talk
 Given at No. British Expeditionary
 Force,—September 25, 1917, Second in the
 Regular Series of Meetings of the Medical
 Officers of the British Army in this District.

Gunshots of the Head, With Especial Ref-
 erence to Indications for Operation and
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- Case 7. Tuberculous Knee and Spine.
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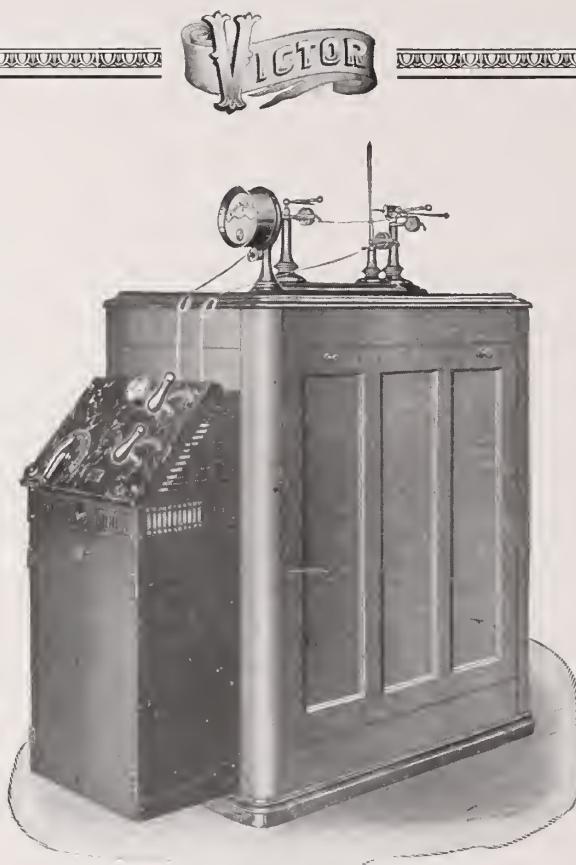
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EYE, EAR, NOSE, AND THROAT.

E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

VOLUNTEER MEDICAL SERVICE CORPS OF THE UNITED STATES.

RULES OF ORGANIZATION.

I. Name.—The name of the organization shall be the Volunteer Medical Service Corps of the United States.

II. Object.—(1) The object of the Corps shall be to establish an emergency medical organization to perform when required, such civic and military duties as are not provided for.

(2) Servicemen of members will be called for and rendered in response to requests to a Central Governing Board from the Surgeon General of the Army, the Surgeon General of the Navy, the Surgeon General of the Public Health Service, the General Medical Board of the Council of National Defense, or from other duly authorized departments or associations.

III. The Corps.—The Corps shall

consist of all members of the organization. The general management of the Corps shall be vested in a Central Governing Board.

IV. Central Governing Board.—The Central Governing Board shall be a committee of the General Medical Board, Council of National Defense.

V. Officers.—The officers of the Corps shall be a president, a vice president, and a secretary, and shall be appointed from among the members of the Central Governing Board. These officers shall constitute the executive committee of the Central Governing Board, and shall direct the activities of the Corps.

VI. State Governing Boards.—(1) The State Governing Boards shall consist of the members of the State Committees, Medical Section, Council of National Defense. The State Committees shall select, subject to the approval

of the Central Governing Board, five of their members who are eligible for election in this Corps to act as the executive committee of the Volunteer Medical Service Corps in the respective States.

(2) The duties of the executive committee of the State Governing Board shall be to consider applications for membership in the Corps from the respective States and to submit recommendations regarding these applications to the Central Governing Board.

(3) The State Governing Board shall aid in the work of the executive committee and perform such other duties as may hereafter be deemed essential by the Central Governing Board to accomplish the purpose for which the Corps was created.

VII. Membership.—(1) Such physicians shall be eligible for membership in this Corps as would be accepted in the Medical Reserve Corps were it not for—

- (a) Physical disability.
- (b) Over age (55).
- (c) Essential public need.
- (d) Essential institutional need.
- (e) Dependents.

(2) Women physicians are eligible.

(3) Application for membership in the Volunteer Medical Service Corps shall be made upon blanks furnished for that purpose by the Central Governing Board. The completed form shall be returned to the Central Governing Board for proper classification according to training and special fitness.

VIII. Method of Election.—(1) The members of the Corps shall be graduates in medicine who are licensed to practice medicine in their respective States, who have made application for membership, who meet the qualification requirements that are now or shall from time to time be established by the

Central Governing Board, and who shall be elected to membership by the Central Governing Board.

(2) Each physician elected to membership in the Corps shall be designated as a member of the Volunteer Medical Service Corps.

(3) It shall be the duty of each member of the Volunteer Medical Service Corps to notify the Central Governing Board when eligibility to the Corps ceases to exist.

IX. Insignia.—(1) Members of the Corps shall be authorized and encouraged to wear the insignia of the Corps.

(2) The insignia may be secured by members of the Corps under such regulations as may be determined upon by the Central Governing Board.

(3) The insignia shall not be loaned to any person not a member of the Corps, nor shall it be worn after notification that eligibility to the Volunteer Medical Service Corps has ceased to exist.

X. Any member of the Corps may be expelled for conduct which, in the opinion of the Central Governing Board, is derogatory to the dignity of the Corps or inconsistency with its purposes.

XI. Authorities.—The organization and insignia have been authorized by the Council of National Defense.

“THE LABORATORY THAT KNOWS HOW.”

The Cutter Laboratory, of Berkeley, Cal., has for twenty years been serving the physicians of the country; but in order to better meet the requirements of the profession, they have re-organized and enlarged their Chicago office, and are better prepared than ever before to serve the interests of our readers. Accordingly this Journal has ac-

cepted their page announcement, and is printing that announcement in this issue. If you find their service available for your practice, we bespeak for the Cutter Laboratory a share of your patronage.

PHYSICIANS FOR THE ARMY AND NAVY AND OTHER BRANCHES OF THE SERVICE YET NEEDED IN LARGE NUMBERS.

We believe we are considerably short of the quota of doctors asked of South Carolina for government service; though the number is now, we are glad to say, increasing. There are probably a large number of applications in the Surgeon General's office at this time. We publish in the issue some data in regard to the Volunteer Medical Service Corps. Information about this corps appears not yet to be general throughout the State.

THE STATE COUNCIL OF DEFENSE TAKES STEPS IN PUBLIC HEALTH DURING AUGUST. THE ENTIRE PROFESSION SHOULD LEND ACTIVE ASSISTANCE.

The medical men of South Carolina to the remotest corners of the State should be intensely interested in the State wide Public Health Campaign to be held the first two weeks in August. Details will appear later but we urge every member of the State Association to lend assistance in this very worthy proposition. The State Board of Health will co-operate actively. A Public Health Institute will be held August 1st and 2nd to train as far as possible the speakers in the special subjects to be presented throughout the State. The State Council of De-

fense requests as many physicians as possible to attend the Institute.

COUNTY MEDICAL SOCIETIES REQUESTED TO VOLUNTEER FOR ARMY SERVICE.

The following letters have been received at this office and should be acted on by our constituent societies immediately. Orangeburg, Charleston and Oconee have unanimously adopted the resolution to volunteer, there may be others.

Columbia, S. C., July 9, 1918.
My dear Doctor:

Enclosed you will find a resolution which was passed by the Orangeburg County Medical Society, and also by the Charleston Medical Society. Resolved, that the undersigned physicians of County, do hereby offer our services to our Country and are willing to apply for commissions when called upon by the State Committee or other authorized agency.

We are submitting this resolution to you to offer at the next meeting of your society. The object in passing such a resolution is to obtain the signatures of all members of your society, stating that they offer their services to the Medical Department of the United States Army, and are willing, when notified by a committee to be subsequently appointed, to apply for commissions.

As you know there will have to be about 200 more doctors drawn from South Carolina, and it is our desire to have only those volunteer who can best be spared by their families, or by the community in which they practice.

This matter is of great importance, and we hope that we may obtain your hearty co-operation in this plan. The

resolution should be endorsed by the County Medical Society, and then submitted to each member for their signature, and after these signatures have been obtained, the resolution should be forwarded to me.

The following is the committee appointed as the sub-committee of the South Carolina Committee of the National Council of Defense, Medical Section: Dr. Robt. Wilson, Jr., Chairman, Dr. C. W. Kolloek, Dr. E. A. Hines, Dr. LeGrand Guerry, and Dr. James A. Hayne, Secretary.

Yours very truly,
James A. Hayne, M. D.,
Secretary.

Charleston, S. C.,
July 8th, 1918.

At a meeting of the South Carolina State Medical Section Council of National Defense held June 21st at Columbia it was decided to request the County Societies to take immediate action following the plan adopted by the

Orangeburg Medical Society, and to secure members of the "Volunteer Medical Service Corps" to serve in emergencies and to perform such medical duties as are not provided for, and to consist of those exempt from service in the "Medical Reserve Corps" on account of

- (a) Physical disability,
- (b) Over age (55),
- (c) Essential public need,
- (d) Essential institutional need,
- (e) Dependents.

Women physicians are eligible.

Please secure the names of such of your members as are eligible and send them to the nearest member of the Committee who will send them Blank Form of Application and the "Rules of Organization."

Committee.

Dr. T. Grange Simons, Charleston, S. C.
Dr. G. A. Neuffer.....Abbeville, S. C.
Dr. E. A. Hines.....Seneca, S. C.
Dr. Julius A. Mood.....Sumter, S. C.
Dr. R. Andrall Bratton, Yorkville, S. C.

ORIGINAL ARTICLES

WHAT SHALL WE DO WITH OUR HERNIA CASES?

By J. H. Johns, M. D., Westminster, S. C.

It is not our purpose, here, to go fully into the important subject of hernia, but to present the subject of treatment for the special consideration of the General practitioner—The "Family Physician"—who, in most cases, directs these patients as to what

they shall do and whose duty it is to advise them for the best.

Oehsner (1) some years ago, estimated that up to the sixth year one child in every twenty-one has hernia. The percentage gradually decreases until at the age of thirteen we have one in every seventy-seven children. In adults, it is estimated (2) that we have four per cent per thousand.

Now, it is plain to us that any person with a hernia is physically incapacitated. He or she is a cripple and, if over twelve years of age, will probably remain so throughout his or her natural life, with the chances in

Read by title before the South Carolina Medical Association, Aiken, S. C., April 18, 1918.

favor of the incapacity increasing instead of improving, unless the condition is corrected. We must take into consideration also that they are constantly in danger of strangulation, which is not uncommon in inguinal and very common in femoral, Kelly estimates sixty per cent (3). These patients are dependent on the doctor to advise them as to what is the best treatment for hernia. What is it?

In children, up to four years old, a truss with a soft pad or a hank of wool yarn, as a truss, is justifiable in inguinal hernia and a cork pad in umbilical, as these measures will sometimes retain the hernia and result in a cure. This period of justification might be extended to the age of twelve years were it not for the fact that after most children reach the age of four or five years they are too active in play for a truss to be safe. A truss will not retain a femoral hernia and should never be used in these cases. We are opposed to the use of a truss in older children and in adults, as it is the exceptional case where a truss completely retains a hernia under all conditions and unless it does retain the hernia under all conditions, it is rather a menace than a help, as it increases the liability to strangulation. We must bear in mind, also, that too much pressure by a truss tends to thin and weaken the abdominal wall and so increases the very condition we are trying to remedy. We consider that fitting a truss is, in most cases, an apology for not being able to relieve the trouble and that a truss is a relic of a time in our history when through lack of knowledge of infection and its prevention, cutting operations were considered only as a last resort.

There is no question in our mind about operation being the proper

treatment in the majority of these cases. Dr. Lincoln Davis, of Boston, says (4): "The operation for the repair of Inguinal hernia is rightly regarded as one of the most satisfactory and simple of surgical procedures." He might say the same for femoral and umbilical. Why does not more of these cases come to operation? Some will not be operated on because of the danger. The operation, when cleanly and properly done, is almost without mortality, in non strangulated cases. Coley (5) reported 3,383 cases of hernia of all kinds, done at the Hospital for Ruptured and Crippled from 1891 to 1912 with a mortality of six; .17% Statistics from Wolfers Clinic (4) show 1,460 cases of Inguinal hernia operated on with eight deaths; .56% Davis (4) reports from Massachusetts General 1,500 cases of Inguinal Hernia with 1,756 operations, counting double hernia, with eight deaths, .53%. These statistics include deaths from all causes, a considerable number of which might be traced, I am sure, to complications resulting from general anesthesia, which it is possible to avoid.

Some patients refuse operation because they are just afraid of the knife. This dread of the knife is, as a rule, easily overcome by the assurance of the family physician, who he feels has no reason to mislead him, that the pain can be eliminated.

Some will not consent to operation because they fear being put to sleep. Personally, I think this is the only real reason for hesitating, when the operation is done by a competent man. General anesthesia, when we consider, the immediate danger, the disagreeable sensations experienced before unconsciousness is reached, the nausea following, together with the harmful effects on the lungs, kidneys and other

organs, is sufficient to justify some hesitation on the part of the patient. This obstacle is easily gotten over by means of local anesthesia, which, I think, should always be used in hernia operations on adults. The nerve supply in the regions most often occupied by herniae are such as to make local anesthesia very easy and, I consider, almost ideal in these operations. By this means, they may be done safely, painlessly, and without the above unpleasant after effects. As we have said before (5), we consider it almost criminal to give general anesthesia for herniotomy in the adult, when it can be done so easily and safely under Local.

Some do not come to operation because the doctor has told them that operation was not necessary, that he could fit a truss which would fix them all right.

Now as to the results of operative treatment: Coley (4) reported 3100 operations for Inguinal hernia with a recurrence of less than 1%. Statistics from Wolff's Clinie show a recurrence in from 5 to 8% (4). Davis (4) reports 3.7% recurrence in 1756 operations for Inguinal hernia at the Massachusetts General. This series was done by 75 operators some of which were junior internes.

In considering the mortality from these operations, we must remember that some of these cases, if not operated will go on to strangulation; in which case operation is imperative but carries a mortality (1) averaging 20%. In strangulated cases, operation done 1st. day carry an 8% mortality, those done 2nd. day a 22% mortality those done 3rd. day a 45% mortality and those done 4th. day a 60% mortality. The mortality without operation in these cases is, of course, practically 100%.

Now, in conclusion, the question we wish to put before you as Family Physician is: Given a patient with a hernia is constantly in danger of it strangulating, notwithstanding a truss who has to suffer the constant annoyance of a truss and who, unless he is operated on, is doomed to this danger and annoyance as long as he lives, but who by having an operation, which is practically devoid of danger, pain or disagreeable after effects, can, with a reasonable certainty, be cured of the condition and thereby changed from a hopeless cripple to a well strong man or woman. What are you going to advise?

References.

1. Dacosta's Surgery, 1915, p. 1158, Quoted from Oehsner in Journal, A. M. A. Dec. 22, 1900.
2. Dacosta's Surgery 1915, p. 1134.
3. Kelley's Operative Gynecology, 1914, Vol. 11, p. 604.
4. Davis Lincoln, Journal, A. M. A. Aug. 12, 1916, p. 480.
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COMMON HEAD COLDS.

By E. W. Carpenter, M. D., Greenville,
S. C.

DEFINITION: An infectious and contagious disease involving a part or the whole of the nasal mucosa, including the accessory sinuses, the symptoms usually limiting themselves to the respiratory apparatus, but the remotest parts of the body may become involved.

Lack of more exact knowledge of the etiology and pathology among the

profession can not be accounted for on the ground of infrequency or inconsequentialness because the disease is always with us in forms more or less severe and its effects on the human economy may reach to its remotest structures.

Classification: Direct. (1) Bacterial.

The principal scope of investigation has been in an effort to isolate a specific organism. Many workers, and investigators have agreed and as many have disagreed in deciding this question.

The difficulty lay in the fact that in the early stages of an infection there is a variety of organisms, often without a predominating type and as the infection progresses this picture changes until there seems to be a survival of the fittest, then we have a predominating bacteria, but the identity of this organism is not constant in the different controls. This has led to different conclusions as to the results of different investigators.

The above result in bacterial study accounted for great variance in laboratory work. To illustrate: A mixed infection transferred to a healthy nose some times failed to infect, when infection did occur the mixed type of organism rapidly disappeared and a predominating bacteria supplanted it. This predominating bacteria was not identical with the different investigators. So investigators failed to indite any single organism as a specific cause. Foster in the American Medical Journal, April 15, 1916, writes that he observed bodies ultra microscopic in size, he believes them to be organisms because Berkfelt filtrates diluted to 1/10000 strength have produced classic rhinitides and excretions from those infections reproduced the original symptoms, while the identity of Foster's organisms have not been worked out, further study along this line of investi-

gation holds out brilliant hopes for isolating an additional infection agent. Writers agreed that the cocci group are generally the offending organisms.

II. Indirect: Under this caption I wish to call attention to a condition which appears to be an aborted cold.

which is only a paretic state of the nasal mucosa and which may subside without infection or may go on to suppuration. This state of swelling represents the first stage of inflammation minus the presence of offending organisms. This state may be produced by (a) a disturbance of the endocrine secretions, such as is seen in children during fits of anger or sorrow or crying. (b) drafts, sudden changes of temperature. (c) auto toxemias. (d) irritants, either mechanical or chemical. (e) mechanical, i. e. septa. (f) reflexes from eye strain. The above influences produce a paresis of the vascular apparatus of the nasal mucosa. This is really a first stage of inflammation in this favorable soil the condition disappears as soon as the nervous mechanism reasserts itself and a normal balance is restored. Thus in a very short time we often see all the preliminary signs of a cold in the head clear up.

III. Reinfections: This type represents the socalled chronic cold and I believe that we often find the course of this infection in ulcerated gums, septic tonsils, adenoids and subacute or chronic sinuses.

In order to understand the pathology let us review the anatomy. The accessory sinuses are part and parcel of the nares, and the drainage of these is practically the whole problem in the treatment and cure of this ailment.

The nasal accessory sinuses are regarded by some authors as mere vestigial remains of organs which in lower animals and primitive man had impor-

tant olfactory functions. Originally they formed a part and parcel of the nasal cavities and communicated with them through wide openings. But as their usefulness as olfactory organs lessened, they became gradually walled off, leaving small communicating apertures or channels, we can readily understand that these openings must be maintained in order to provide ventilation and drainage of cavities still lined with functionally active mucous membrane. If the vestigial character of the sinuses be accepted, it follows that they must be regarded as organs of inferior vitality, a fact which may explain on the one hand their reputed vulnerability to disease, and on the other their incapacity for complete repair after extensive injury.

The mucous membrane of the sinuses differs from the mucous membrane of the nose in degree rather than in kind. The glandular elements and nerve filaments are less numerous and the blood supply to the mucosa less abundant. Not only, however, is the layer of epithelial cells thinner but especially to be noted is the fact that the genetic layer of the epithelial surface is less substantial, all facts pointing, it seems to me, quite significantly to a lessened power of regeneration on the part of the submucosa. Therefore, from histological as well as developmental considerations, arguments are drawn which speak strongly against extensive operative intervention and in favor of extreme conservation in dealing with accessory sinuses.

A few words in regard to their anatomical peculiarities: The nasal accessory sinuses give us very little concern in early childhood and almost none at all during infancy. The maxillary sinus is present in but rudimentary form at birth; its permanent shape and normal position are not obtained until

after the eruption of the permanent teeth. The frontal sinus is not present at all at birth; it makes its first appearance at about the second year and at about the eighth year assumes the form of a distinct cavity. The ethmoid and sphenoid sinuses are present at birth, but like the others, develop slowly and do not assume their complete form and size until puberty or even later.

Demonstration of Ostia of the different Sinuses.

Skinner has shown that if finely powdered lamp black is strewn over the mucous lining of the sinuses of freshly slaughtered calves, the black particles may be observed to travel the space of 1c. m. per minute toward the ostium, no matter what the situation and that in a short time it will have completely escaped into the nasal cavity. This is accomplished through the activity of the ciliated epithelium which is without doubt the most potent force in ridding the sinuses of contained secretion. The mucous membrane of all the nasal accessory sinuses is of the ciliated type. The fine hairs or cilia are in rapid and constant motion toward the sinus opening.

The wavering of one of these cilia has been likened to the lashing of a whip. It is estimated to occur at a rate of about twelve times a second, the forward movement being twice as rapid as the return. Warmth and an alkaline reaction of the secretions favor this activity whereas, cold, too great acidity and irritant chemicals have a retarding effect. We see therefore, in the action of these cilia a powerful force overcoming laws of gravity. We see at the same time the necessity of their integrity being maintained and of the importance of securing a proper environment for their activity from which facts we may not only draw gen-

eral arguments in favor of conservatism, but also some practical deductions for local treatment.

In the plan of lymphatic distribution, unlike the case of the blood supply, there is a reason for the common involvement of the sinuses or the extension of the disease from one to another. The lymphatics forming an interlacing network over the walls of the individual cavities seem to radiate in each case toward the ostium where they communicate with large vessels of the nasal fossae.

"Patency of the Ostia is necessary for the ventilation and the draining away of secretions. Once the flow begins through the Ostia the adhesiveness of the viscous excretion prevents a perfect level of the fluid in the sinus, always we find it pulled up to the Ostia by escaping fluid, patency of the nares permitting free blowing of the nose creates more or less of a vacuum in the sinuses, then that part which is expelled drags on that which remains in the cavities and assists in withdrawing it."

Treatment: This depends largely under which of the preceding heads the cold is classified. I shall confine my remarks now to those cases of direct infection where the mechanics of the nose and sinuses are normal. The multiplicity of drugs given internally is of itself sufficient evidence that none of them are of much efficiency. In the first or congestive stage local applications are not curative in any sense, one can procure some relief from pressure symptoms by the use of vaso constrictors. I question the wisdom of using these drugs because the subsequent re-

laxation is greater than before they were applied. After resolution begins and suppuration appears, warm bland alkaline douches are very comforting and helpful, they keep the fossa cleared of discharges and are particularly useful in promoting the drainage of the sinuses, these cavities become involved to a greater or less extent in all "colds in the head, and become filled with excretions which are discharged by overflow in those sinuses whose ostia are not situated at dependent portions of the sinuses. The Cilia are put out of action early in the process because congestion of the mucosa causes them to swell and their motion is restricted. The treatment resolves itself into the use of some agent which will limit or destroy the invading organisms before nature rallies her resources. I believe that the use of mixed catarrhal vaccines offers a very attractive remedy. I have been using Lederle's product for about one year and have had more satisfaction in the treatment of these cases than any other method I have ever tried. The best results are obtained in those cases where some reaction is procured, it is usually a local reaction, it may be constitutional manifested by slight muscular aching or fever and more or less discomfort. I have never observed a focal reaction. The dose should be regulated according to age and weight of the patient and the stage of the infection. Treatment of cases under the last classification, involves surgical aid and opens up the whole chapter on diseased sinuses which is not within the province of this paper.

SOME POPULAR IDEAS ABOUT INSANITY.

By R. L. Leak, M. D., Medical Director
State Hospital for the Insane, Columbia, S. C.

IN the growth of any branch of science, it is well to stop and consider the relationship it may bear to the other sciences and the community. This applies to mental sciences or insanity in a very definite way. Nothing in the way of a comprehensive nature will be attempted here, but rather a short review of the progress made in our attitude towards the mentally sick person. Technical terms will be eliminated as far as possible.

Rarely does a physician experience as great a satisfaction as that which attends the recovery of an insane patient. Scarcely less pleasing is the lifting to a higher plane the chronic ease in order to make the most use of the remnant of his life.

One can best appreciate the significance of the views held at present by first referring to the status of the mentally deranged in the past. It is well to ask how well we have kept up with the advance, not only the care of the insane in the Hospital, but also in the home and community.

So far as can be ascertained, the Insane have been known as far back as in the history of man itself. We are told that the ancient Egyptian priests recognized madness and advised kindness towards them,—advocating music, recreation and occupation. The early Greek protested against restraint. These comparatively advanced views were lost sight of in the

centuries following. Instead of being regarded as sick, these unfortunates were regarded as being possessed of devils, and of being bewitched, and their treatment was in accord with this view. They were punished and tortured to drive out the demoniacal possession. They were chained and cast into dungeons and jails and were burned.

In twelve forty seven, a priory of the order of the "Star of Bethlehem" was founded in England, which later became known as the famous "Bedlam." It is not known when lunatics were first housed therein, but it must have been about fourteen three. It was a place where sightseers could go on a day's frolic, and seek enjoyment by poking sticks at the lunatics and watch their ravings, as one would do to a cage of animals.

In seventeen ninety two, Pinel, in Paris, and William Tuke, in England, protested against the harsh measures then employed, and advised kindness and sympathy, but up to eighteen forty one, chains and pillars continued to be common factors in the care of the Insane. It is curious to read now of the whirling chair treatment and of the wondrous soothing influence it had upon the Insane, or, in our own times, of the effect of the Utica Crib as a means of controlling the violent, or even more, recently the writer was asked to pass upon a contrivance made of canvas strops, which were to be fastened to the head, foot and side of the bed, thereby making a sort of a cage, but which was advocated as being a most humane restraint. It is difficult to explain the slowness of the caretaker in appreciating the value of humane treatment since it was fully demonstrated by Tuke at York retreat, that gentleness resulted in quiet and order.

In this country, we were slow to take advantage of the knowledge gained, and the mentally sick were committed to jail or almshouses, and were chained and despised even by the criminals with whom they were often housed.

The first State Asylum in the United States was erected in Virginia at Williamsburg. In eighteen twenty seven a law was passed in New York State forbidding the confinement of those suffering from mental disorders in jail. Many states did not build Hospitals until later, but between eighteen forty and eighteen sixty, there was a widespread movement, which leaned to State care for the Insane. South Carolina can well be proud of the institution conceived in eighteen twenty two and which I believe is the oldest building in the United States still in active service.

This brief review is possibly sufficient to bring to our minds the tremendous change that has taken place in the attitude towards the mentally sick person. I say mentally sick, as it conveys better the correct idea of insanity, than any other term, and serves in a way to differentiate broadly the mental defective.

The Hospital should be a home where he is cared for by nurses and trained attendants. They are innovations which result from a belief that an individual is mentally sick; not because some unnatural force or evil spirit has claimed him, but because he is a victim of certain conditions to which we all are to some extent exposed, and for which all must share the responsibility.

This view is one of hopefulness, lends itself to rational thought and study. As in all other lines, exploration in some avenues have not yielded any great increase in our knowl-

edge, but as a whole gives greater consideration to the sick man and promises to make the future brighter for him in many respects.

Formerly lunacy was believed to be caused by peculiar agencies and ascribed to "black art," "the evil eye," and some other term symbolic of mystery and the unnatural. It is hardly necessary to say that even to-day the belief of former times still have their effect, for one has but to consider the attitude assumed toward one, who is supposed to be insane, by their own kin. With this, superstition beliefs are partially responsible, and we must admit, have a powerful influence on human conduct. The fear of the supposed evil influence of the number 13 has persisted over five thousand years, for we are informed that the people of ancient Babylon believed in 13 superstition and regulated their behavior to some extent accordingly. We have not yet learned to subdue this fear. Nor have we entirely overcome other ideas we had in relation to the Insane. As for instance, its relation to lunar phrases.

But let us remove our minds from the older conception and consider some of the Insane in the light of more recent training and practice. Let us take a glance at the working of a modern Hospital, in so far as it relates to the view point of the Insane.

When a patient comes to the Hospital, it is no longer expected that he will be bound hand and foot, but rather enters as a sick man needing medical care. He is placed at once on a ward with women nurses whenever possible, and made to feel that to be mentally sick is no more disgraceful than to be physically sick.

From the study of the symptoms, we recognize certain types of mental disease, which are quite clearly de-

lineated to a psychiatrist. Casual observation will not suffice here any more than it will in the interpretation of an X-ray plate, or the findings in any branch of scientific medicine. Permit me to quote from the late Dr. Wm. Mabon:

"Insanity is a general term for a multiplicity of conditions, which differ in origin, characteristics, and outcome; their management and treatment is correspondingly different. It is divided into many groups. Some are due to growths, changes in, or injuries to, the substance of the brain. Some, and these are preventable, arise from toxic material, as alcohol, opium, drugs syphilis, or the products of bacteria. Some are associated with other nervous diseases as hysteria and epilepsy. One form, the manie-depressive, has two phases, one manifested by great physical or mental over-activity, that is by excitement. The other by a depression with mental and physical retardation, or these two forms may alternate in the same patient. Sometimes the insanity is a disorder of the thought process leading to misinterpretations and false ideas and without evidence of being accompanied by any physical disorder. In a large class of cases there is a general mental enfeeblement, oftentimes with pronounced physical changes due to organic diseases and frequently associated with senility. Again, it may be the outcome of inherited or acquired constitutional states, rendering the subjects peculiarly susceptible to upsetting influences or incidental physical or mental experiences, presenting difficulties in adjustment which the normal person can overcome, but which in these cases lead to mental breakdown.

There is no doubt that the old classification of mental diseases exerted

considerable influence in repressing new ideas. An independent observer who saw a ray of light or attempted to examine insanity from a new standpoint was crushed under the authorities that all forms of excitement were mania and that all uneasy states were melancholia. Individual study was somewhat hampered by those in authority on classification. However, we observe certain breaks against these rulings and find that Bayle in 1822 separated from the Dementia the disease which we now recognize as G. P.; that in 1875 Kahlbaum described a group of cases having periods of excitement and depression with stupor and ending usually in profound dementia and which he called Katatonia; that Hicker described a group occurring about the time of puberty, which were quiet in onset, but terminated also in dementia. These he called Hebephrenia. Then in 1886 Schule suggested the term Dementia Praecox and included both.

It is not uncommon to hear one not familiar with the subject to say that in brief conversation they can tell whether the patient is insane or not. They still cling to the belief that the insane man must be the one who is pulling his hair and keeping things in a general uproar a good share of the time. They do not know that the most dangerous types are those who can carry on a connected conversation, but who conceal their ideas, though who nevertheless are being controlled by them. The mind is not always upset in all spheres, but in a particular part which to the experienced student reveals itself by certain phases, or acts.

Among the more frequent forms of mental diseases are two large groups —Dementia Praecox and Manic Depressive.

The former, Dementia Praecox, is most common and makes up the largest class of the chronic insane. Let me say a few words as to the meaning of this term, as ordinarily used.

It impresses two features of the disease—first, that this condition shows a marked tendency to permanent mental change—for dementia means an acquired permanent mental defect, not merely, as is often thought, a mental disorder of any kind. Secondly, it indicates by the word praecox that it occurs early in life. It is in contrast to the senile dementia which is an exhaustion of the vitality of the brain late in life.

To make clear our conception of this disorder we must start with certain facts which normal psychology teaches us. Anyone who tends to psychologic study will know that every person has certain subjects on which he is especially sensitive, or has certain trends or ideas which are associated with strong emotional feelings. But it is not generally known that these complexes or trends are of great importance in the abnormal as well as normal workings of the mind. It is subject to demonstration that in normal persons the thinking and acting is often influenced by such complexes or ideas and in a manner in which any conscious activity of the will is excluded. It is also shown that these complexes or ideas have a greater influence when the attention is in obeyance and frequently possesses a decided influence.

The mental trends, or tendencies or experiences may be embraced in certain general categories, such as feelings, of short comings, of defect, of limitations in one direction or another. With these are associated feelings of wounded pride, guilt, remorse or shame, or on the other hand we

have various longings and desires which cannot fully be realized and are a source of internal difficulty to the individual. They are matters of internal conflicts. This we must recognize if we get below the surface of mental life. While we admit these conflicts we know that most individuals are able to dispose of them. Those who are unable to properly adjust them break down. Now, if taken early, they may be assisted in making a re-adjustment and be restored to the community. If not adjusted their trends show themselves in abnormal reaction of one type or another as in the insane.

So briefly we catch a glimpse at the beginning of the mechanism of the abnormal mind.

Time will not permit a description of the psychoses or even of anyone except in a very brief manner. The classification used today is elastic, yet gives certain fundamental types for classification and statistical purposes. It is hoped that all institutions will adopt the recommendations of the American Medico-Psychological Association so as to have greater uniformity in the records and reports.

Of all these groups we find that Dementia Praecox is the most common. This condition is usually described as occurring in three or four types, namely, the Hebephrenic, Simple, Paranoid and Katatonic. All are somewhat similar in symptomatology, but vary as to their expressions and reactions.

Following certain general traits shown most in the field of attention and the emotions we begin to see a looseness in the connection of thinking and defects of judgment. Delusions at first are not pronounced and in fact may be largely described by the common term, Hypochondria.

Then develops oddities in behavior or peculiarities in expression and a lack of energy and the following out of any definite mode of life. They are changeable and vacillating.

Sooner or later definite Hallucinations and Delusions appear. These are usually somewhat absurd and may be self accusatory, fearful, or of suspiciousness. We may see self mutilation. The emotional tone is marked by apathy or a silly exaltation and there is a lack of unity in the emotion and the act. Periods of excitement may occur but which show a marked senselessness and impulsiveness differentiated from the activity of the Manic State which is guided by some-

thing definite.

The Katatonic types begin to show negativistic traits doing the opposite to what is requested, suggestibility. The untidiness, refusal of food, resistiveness with periods of muscular tension and impulsive acts. Often the tendency to repetition of an act or saying is very pronounced.

In the paranoid types ideas of persecution are in the foreground. They may or may not be systematized, but usually have considerable influence upon the conduct of the patient. These are the most dangerous types in a community on account of the tendency to seek vengeance upon someone for their fanciful wrongs.

MINUTES

MINUTES OF HOUSE OF DELEGATES 1918 CONCLUDED.
AFTERNOON SESSION.

Called to order by the President.

DR. CARPENTER: The Credentials Committee have asked us to call this roll before we enter into the voting. As I call the roll please vouch for the delegates present or answer to your names. (Roll called.)

THE PRESIDENT: Nominations for President are in order.

DR. EDGERTON: It is my pleasure to name for this high office a man whom all of us know, a man of the State of South Carolina, but who lives at Congaree, S. C.; a man who has probably differed from a good many men in some of his ideas; who has always attempted to put those ideas into moving and going after people when he and others thought that they were right; a man who is a servant of the South Carolina Medical Association, and a servant of the people of South Carolina; a man who would deem it a high honor to be President of this great body. I wish to nominate Dr. J. Adams Hayne.

DR. A. E. BAKER: I arise to nominate one of our members who has given most honorable and high service to this Association, Dr. Harry Wyman.

Nominations closed. The President appoints Doctors Pollitzer and Tripp to act as tellers.

Dr. Hayne, 21.

Dr. Wyman, 15.

First Vice-President.

DR. LYNCH: I arise to nominate a young man, a very promising young

fellow; one who has been in frequent attendance on our Medical Society, and is, physically, a fine-looking fellow. I nominate Dr. E. T. Kelly.

Upon motion of Dr. Timmerman, duly second, Dr. Kelly elected by acclamation.

Second Vice-President.

DR. TIMMERMAN: I nominate Dr. Pitts of Saluda.

DR. EDGERTON: I move that nominations be closed and the Secretary be instructed to cast the unanimous ballot for Dr. Pitts as Second Vice-President.

Motion seconded and carried.

Third Vice-President.

Motion that Dr. Edgerton of Columbia be nominated.

DR. TIMMERMAN: I nominate Dr. Baxter Haynes of Spartanburg.

DR. HAYNES: I nominate Dr. Hall, of Aiken.

THE PRESIDENT: The Constitution says that "No delegate shall be eligible to office except that of Councilor," etc. (See by-laws.) Now Dr. Edgerton is a delegate and I take it that he would not be eligible.

DR. TIMMERMAN: I move that the Secretary cast the ballot for Dr. Hall, for Third Vice President.

Motion seconded and carried.

SECRETARY-TREASURER.

DR. J. R. YOUNG: I would like to place in nomination Dr. E. A. Hines, to succeed himself.

Seconded by several.

DR. TRIPP: I move that the President cast the unanimous ballot for Dr. Hines, to succeed himself.

Motion seconded and carried.

THE PRESIDENT: Dr. Hines, I take this occasion to thank you for your continued service, and to congratulate ourselves upon having such a worthy officer.

DR. HINES: Mr. President, I appreciate more than I can express this high honor, and I thank you for your cordial words.

COUNCILORS.

2nd Congressional District.

Dr. Matthews nominated to succeed himself. Seconded.

Upon motion, nominations closed, and the Secretary casts unanimous ballot for Dr. Matthews.

FOURTH DISTRICT:

DR. LANCASTER: I nominate Dr. Baxter Haynes, of Spartanburg. Seconded.

DR. BLACK: I arise to nominate a gentleman of the highest type, one who stands second to none in his attainments along his special line; a man who has been loyal to the profession at home and abroad—Dr. L. O. Mauldin, of Greenville.

Seconded.

Count: Dr. Mauldin, 25, Dr. Haynes, 10.

SIXTH DISTRICT:

DR. GRAHAM: I wish to nominate Dr. May, of Bennettsville. Seconded.

Upon motion, nominations closed and the Secretary requested to cast unanimous ballot of the Association for Dr. May.

SEVENTH DISTRICT:

DR. EDGERTON: Mr. President, I would like to nominate for that position Dr. S. E. Harmon, of Columbia. Dr. Harmon is a man of very even

temper; he weighs subjects before he decides, and usually does the right thing.

Seconded by several.

DR. STUCKEY: I would like to nominate Dr. Walter Cheyne, of Sumter, who served us well for some time as Secretary.

Count: Dr. Harmon, 20; Dr. Cheyne, 12.

EIGHTH DISTRICT:

DR. BRIGGS: I nominate Dr. W. P. Timmerman for re-election.

DR. TRIPP: I move that nominations be closed and the Secretary requested to cast the unanimous ballot for Dr. Timmerman. Motion seconded and carried.

BOARD OF EXAMINERS.

SECOND DISTRICT:

DR. BAILEY: I nominate the present incumbent, Dr. Harry Wyman. Seconded.

Upon motion nominations closed and the Secretary requested to cast the unanimous ballot for Dr. Harry Wyman.

FOURTH DISTRICT: Dr. Shaw.

Motion that Dr. Shaw be nominated to succeed himself. Seconded.

Upon motion of Dr. Carpenter nominations closed and the Secretary requested to cast the unanimous ballot of the Association for Dr. Shaw.

SIXTH DISTRICT: Dr. Brailsford.

DR. MAY: I nominate the present incumbent. Seconded.

DR. HARDIN: I nominate Dr. May, of Bennettsville. Seconded.

DR. EGGLESTON: I would like to second the nomination of Dr. Brailsford. I think we should continue him in office.

DR. MAY: I would like to withdraw in favor of Dr. Brailsford. He has made a very efficient officer and I would like to decline.

Upon motion nominations closed, with the nomination of Dr. Brailsford, and the Secretary requested to cast the unanimous ballot of the Association for Dr. Brailsford.

STATE AT LARGE: Dr. Boozer.

DR. MAULDIN: I nominate Dr. Boozer to succeed himself, and move that the nominations be closed and the Secretary requested to cast the unanimous ballot of the Association for Dr. Boozer.

Motion seconded and carried.

THE SECRETARY: Mr. President, last year the house provided for the election of the members of the Scientific Committee. Dr. Catheart is member for three years, Dr. Black for one year, and Dr. Coward for two years. Dr. Coward is in the service, and Dr. Black goes off at this time. Of course the place that Dr. Black holds is open. Dr. Coward may not be able to act on the Scientific Committee.

DR. LANCASTER: I nominate Dr. Black. Seconded.

DR. EDGERTON: I move that nominations be closed with the nomination of Dr. Black, and that the Secretary cast the unanimous ballot of the Association for Dr. Black.

Motion carried.

**REPORT OF DELEGATE TO A. M. A.
READ.**

Report Sims' Memorial Committee.

DR. HINES: Mr. President, we did not meet during the year, have no report to make, but it seems to me that something should be done. We have only \$50. on this fund and are supposed to secure \$5,000. We have been

at it for ten years. Dr. Baker was the first to suggest this monument, and he has been Chairman all these years. I think it is well for us to dispose of the matter in some way. The Legislature holds \$5,000 ready for us when we secure \$5,000.

I am sorry that I have not a report. Committee continued. The Chairman to be appointed by the incoming President.

Report of Committee on Prevention of Venereal Disease read. (See report.) Now, Mr. Chairman, we have with us today Major Sawyer, from the Surgeon General's office, who I understand is especially up on these lines, and I would be glad to have you ask him to speak.

MAJOR SAWYER: This is a question that is extremely important to the army; one which the Surgeon General feels is perhaps the greatest and most important questions of all our health problems. We have had 55,000 cases of disease reported, taking an average of six days' disability, that makes a time as long as from Alexander the Great to the present time. Most of that disability was contracted before those men put on the uniforms. We have the promise of a remarkable success in the work that has been done for the soldier in the camp. We are now getting segregated reports from all of the soldiers of the camps, and eighty-three per cent dated before enlistment. The remaining seventeen per cent were contracted after the men came to the camp, and that shows where the loss is coming from. It dated to the community from which the men come. To get real results for the army we have to begin now, not only thinking about the fellows in the camps who are going to be at home on furloughs, but

the men who are going to be called in the succeeding drafts, and if you will follow the conditions abroad you will recognize that there may be many succeeding drafts, but, however that is, we have to go on the supposition that it is going to be a long war, and we have to do everything which tends to buildup the health of the army. Last night certain regulations were drawn up which have the approval of the Surgeon General, in the public health service, represented by Surgeon General Brown here, Surgeon General Gorgas, and the Surgeon General of the Navy. Part of those regulations are in force in many parts of the country, and proving successful, if one can judge in this early stage. They mark an epoch in public health. They mean that we are beginning to give due attention to a group of diseases which are fully as important as tuberculosis, and a great deal more important than any other disease,—as important as any of the other common contagious diseases, or all of them put together, and the resulting inefficiency. These regulations cover a number of points. They put these diseases right squarely along with other diseases, making them reportable,—not by name, but by office number. This shows what diseases are prevalent, what communities require special attention, and enable the officials to exert their efforts where they will do the most good. It provides that where patients are refractory and refuse to take treatment or to go to another physician or institution for treatment they should be reported by name. This I think with the co-operation of the medical profession will mean that many cases of syphilis are treated until they are cured. Of course the records should be most carefully guarded.

Your Chairman on Venereal Dis-

eases outlined the measures but one point he did not touch upon. In this modern American program the health officials have gone on record and recognized the importance of diminishing the number of infections by law enforcement. They are employing men to see about the vice zone and diminishing the number of contacts. It is one of the big measures, and one reason why the program in America is more successful than the program of the army already in the field. It forbids druggists from prescribing and will stop some of the other injurious slipshod treatment of men who should get the best.

In closing I just want to say how much the Surgeon General appreciates the stand taken by your executive committee. He appreciates in this State which, for its population, is perhaps the most important state in the United States, on account of the number of men of the army: in keeping down the diseases brought into the camps, from your civilian population.

I thank you for allowing me to say these few words.

THE PRESIDENT: It is most pleasing to have had you. It is pleasing to know that we are so nearly in line with the desires of the department.

REPORT OF THE COMMITTEE ON HEALTH INSURANCE.

DR. BOOZER: I have no report to make, sir.

REPORT OF COMMITTEE ON EFFI- CIENCY AND STANDARDIZA- TION OF HOSPITALS.

THE SECRETARY: Mr. President, I don't think our Committee has done anything in the past year.

DR. YOUNG: We have not had any call from the President, and the Committee has had no meeting.

Report of Committee on Necrology.

THE SECRETARY: Dr. Smith, of Spartanburg, writes me that he is sick and has made up this report in a sick bed the best he could.

Spartanburg, S. C., April 12, 1918.

Dr. E. A. Hines,

Seet. S. C. Medical Association,
Seneca, S. C.

Dear Doctor:

I am sorry I can't be with you to give this report but for the last three or four days I have felt that my name was going to entered in the report, as I have been sick with the grippe for the past week. I hope you all will have a successful meeting and a good attendance.

Enclosed I will present you a letter which I wrote to the secretary of each county medical society, asking a report on the deaths that occurred in their society. My answers were few and unsatisfactory. I am going to prepare this report the best I can in bed and will thank you to fill it out or alter as you see fit.

With kindest regards, I am,

Sincerely yours,

D. L. Smith.

Spartanburg, S. C.

Dr.

See. Co. Med. Soc.

Dear Doctor:

As Chairman of the Committee on Necrology of the S. C. Medical Association I would be glad to get a report of all deaths of members in the past year with date of birth, graduation, and date of death as well as a short sketch of his works.

Hoping to meet you in Aiken,

Yours truly,

REPORT OF COMMITTEE ON NECROLOGY.

Dr. J. Thomas Shirley was born in Abbeville on November 10, 1859 and died, 1917. His father moved to Anderson, where Dr. Shirley received his education. He attended the Old Patrick Military Institution. He was graduated from the College of Physicians and Surgeons, Baltimore, in 1887, later taking a post graduate course in New York. He practiced medicine in the town of Central for thirty years; was a member of the Baptist church, holding the position of clerk for twenty years. He was company surgeon for the Southern Railway Company.

Dr. William L. Pou was born in Lexington County, February 17, 1829; died November 28, 1917. He graduated at the University of South Carolina in 1849 with honors. In 1852 he graduated from South Carolina Medical College. He was in the active practice of medicine for over sixty years.

Dr. Albert Nathan; born in Charleston, February 27, 1886; died in Boston, October 23, 1917. Dr. Nathan graduated from South Carolina Medical College in 1909. He was greatly interested in the work of the Anti-tuberculosis Society and devoted a great deal of his time to this work.

Dr. Cullen Clinton Jones; born in Greenville, October 17, 1860; graduated in medicine in 1882. Dr. Jones was mayor of Greenville in 1903-4. Retired from practice in 1914. Died January 7, 1918.

Dr. Robert Love Moore; born May 12, 1872; died January 4, 1918. Graduated in medicine in the year 1896 from the University of Maryland, Baltimore. Dr. Moore made a specialty of ear, eye, nose and throat work. In his professional work he

was noted for his conservatism and his treatment of the patient rather than the treatment of some exploited disease.

Dr. S. C. Baker, Captain in U. S. Medical Reserve Corps, died Tuesday, March 19, 1918, following a short illness of pneumonia. Dr. Baker had relinquished a very remunerative practice to take up work in the army, as he felt that experienced doctors and not young men who had yet to establish themselves in their profession, were the ones to serve in the army. He was stationed at Camp Wheeler, Macon, Ga., but was home on a short furlough recuperating from lumbago when he took pneumonia and only lived a few days. Dr. Baker was born in Clarendon County, in December, 1866; lived in Sumter County practically all his life. He was elected President of the South Carolina Medical Association at Summerville in 1909; served as Chairman of the Board of Medical Examiners a number of years; at his death was chairman of the Council of South Carolina Medical Association.

Dr. Edward M. Boykin died in Charleston, April 4th, 1918, of meningitis. Dr. Boykin belonged to the well known Camden family of that name and was a resident of Charleston from the time of entering medical college. He graduated in the class of 1905 and practiced there steadily until his death. He had built up a large practice and acquired a splendid reputation as physician and surgeon.

Dr. T. Prioleau Whaley; born July 12th, 1870; died January 14, 1918. Dr. Whaley was secretary of the State Medical Association for nine or ten consecutive years and afterwards was elected President. He was a prominent surgeon and was really one of the first men in South Carolina to

take up genito-urinary surgery as a specialty.

NEW BUSINESS.

DR. MAY: At the last meeting of the Marlboro County Society we passed a resolution that none of our members should write prescriptions for whiskey, and requested me to ask the Association to go on record as refusing to write prescriptions for whiskey under any circumstances.

Seconded by several.

DR. YOUNG: As I understand it, the gist of the law is this: That no probate judge can give an applicant an order for a quart of whiskey without being certain that it is to be used for purely medical purposes, and the person has to have a medical certificate to that effect. So if we will, we can pretty nearly put out the booze proposition in South Carolina, and I am heartily in favor of this for reasons of patriotism, food conservation, and for general efficiency in manhood! (Applause.)

DR. POLLITZER: I think if that is carried out it may possibly work a hardship on some people. The American Medical Association has ruled that whiskey is no good as a stimulant, and yet there are many doctors who do use it as a stimulant. For instance, I recently treated a baby with pneumonia, and gave that baby eight to ten drops for several days. I felt I had a right to do that, and if a physician has not the right to get that from a druggist, I think it is not well.

I know many men have written prescriptions to do a man a kindness, but if it is indicated I do not see why he should not order it. I just wanted to present the other side of the question.

DR. TIMMERMAN: Mr. Chair-

man, I have never written a prescription for whiskey, I doubt very much if I will be asked to write one by those who know me very well, but I do not like to put a premium upon wrong-doing, and so surely as you pass that resolution there will be an element of physicians in this State who will withdraw from the Association, or who will write them for months, for gain. It is much better for them to associate with the better element of the profession than to be completely eliminated from it and outside of the better influences; and you will find the others may do it.

DR. BARRON: I think a man could use his own judgment, but I feel, as Dr. Young does, the buck should be passed to the Medical Society. We don't need it except a few ounces for the treatment of a child, and I think we should condemn it strongly.

DR. WYMAN: Here is the harm it is going to do: It is not going to be carried out, and is going to do more harm than good. I would rather endorse the A. M. A. resolution, and we might add that we look down on this promiscuous prescription writing.

DR. HAYNES: In Spartanburg if you write a prescription no one will fill it. There is no one to fill it.

THE PRESIDENT: I think the point is that the Probate Judge recognizes it.

DR. STUCKEY: This is not writing a prescription, but a permit to a man to get whiskey. I have never written a prescription for whiskey and do not expect to. Yesterday a man came up to me and asked me to write a prescription for him to get a quart out of the express office that was already there. Of course I refused. They put that up to us with-

out any reason. Let's hand it back to them.

THE PRESIDENT: Please read the resolution.

DR. MAY: Resolved, that the Association go on record as condemning prescription writing for any circumstance." You cannot have a prescription filled legally, any way, in this State.

DR. YOUNG: I would like to offer this:

"In as much as the legislature of South Carolina has passed a law that no one can secure a shipment per writ under the 'Quart a month law,' except he present to his Probate Judge evidence that such liquor is needed for medicinal purpose, and inasmuch as many of the probate judges are requiring a physician's prescription as proof of such need; therefore, be it resolved, that the House of Delegates go on record as distinctly disapproving of the giving of such permit by physicians, and that it strongly urge every member of the South Carolina Medical Association to give such prescription only when he feels it absolutely necessary to the welfare of his patient."

Motion seconded and carried.

DR. WYMAN: I wish to offer this resolution:

Resolved, that the house of delegates retain in good standing all members of the Association who are in the medical service of their country, and who were in good standing before going into the service, without further payment of dues, during the term of service.

DR. EDGERTON: We had some talk in Columbia similar to this, and we decided that it would be quite a drain on the State Medical Association for them to maintain the members in good standing who were in good

standing previous to their entry into the service, but that the local societies could probably do it better than the Medical Society.

THE SECRETARY: Mr. President, the Council has talked over this matter and a great many societies have paid the dues for this year of their members. There has been no action taken and I have had letters from some societies asking what was the thing to do, and all I could do was to tell them what other societies had done, and that was that practically every State has agreed that the constituent county society shall pay the dues of the men and keep them in good standing. I do not know of any state to the contrary but Penn.—one of the very wealthiest states! Probably if the war goes on and we have perhaps fifty per cent of the men in the service, it is going to very seriously eripple our finances within two years' time. We will be \$500. short, as it is. Many societies have not reported, and I do not know whether they will or not. So that is the gist of the matter as it is now. I do not know but one state that has taken the position the resolutions intend.

DR. HARMON: Our society in Columbia passed a resolution that we would keep our membership up for the men in service, and I would like to make a substitute motion for Dr. Wyman's, that we request our local societies to do likewise. The Charleston County Society has taken similar action and the men continued in the society by the local society paying their dues.

DR. ANDERSON: I am heartily in favor of the local societies paying these men's dues and keeping up their membership in good shape by these small contributions, and it is a pleasure instead of a burden; so we in-

sist on keeping up our own men rather than put it off on the State Association.

Motion put that the County Societies be requested to keep up their own members.

Seconded and carried.

DR. POLLITZER: I would like to say a few words about the subject that Dr. Barron brought up this morning. We all see advertisements covering half or whole pages, of men, in which they speak of the fact that they are general specialists and can cure almost any disease; that many come to them and others should come. This does not hurt the medical profession, but it is an injustice to the people. I believe it is our duty to try to stop this practice. How it can be done I do not really know, but I do not believe any complete attempt has ever been made to try to stamp out the evil. It might be done by the State revoking the license, or by the medical college taking away the degree. I do not know whether that is legal, but I would like to see some definite steps taken, for if we do not it looks to the people as if we were sanctioning this blackmail. On the other hand, if we say anything, many people think we are simply jealous!

DR. HAYNE: Dr. Dowling, of Louisiana, has gone to the New Orleans Picayune and other large papers and put the matter squarely up to their business managers, and has succeeded in having some advertisements eliminated by the business managers of the paper. If we can go to the State, and the Charleston News & Courier, and so on, and persuade them not to allow these quacks to appear, I believe they will respond and take them out. You know the State refused for a long time to take whiskey advertisements, on the ground

that it was a moral stand, and it does seem to me to take the same stand for patent medieine and quaeks is their duty. That is the only way we can get at the quaek.

DR. HARMON: We took this matter up and went before the managers of those papers and they flatly refused and you will find that in most all instances they will not listen to you, because they receive large money for these advertisements. I think the only thing is for every one of us to try to influence our legislators to pass a compulsory education bill, and when we educate our people they are not going to be so easily fooled.

DR. BARRON: This thing comes up as a war measure, and we are discussing things that are going to help win this war. I get a good many people from the camp,—soldiers and officers—and I boil, sometimes, to think how they are held up. I tell them if any one pointed a pistol in their faces and held them up the local government would handle them. I took the matter up with the commander and he said he was going to tell them not to patronize these men in Columbia.

Dr. Harmon mentions the papers have absolutely refused, in the past, to co-operate, but now every one seems to be trying to pull together, and I believe if the representative men of this Society, or a proper committee of representative men, should communicate with every paper in this State and give them the sentiment, in view of this country being at war, and how much it means to get rid of such undesirable citizens, it would help. We know that advertising is the thing that turns the trick. If we did not toot horns and boast up liberty bonds there would not be so many sold. The same way with those men. It is

delightful reading, and if one is suffering he is apt to go to the advertiser, if ignorant of medicine. The men do not know anything of medicine, and the first thing they will borrow five hundred dollars and go to that quaek and get fleeced. I have seen many of these men in the camps who said, "I read their advertisements." They seem absolutely ignorant of the fact that all decent practitioners keep their names out of the advertising columns.

DR. LYNCH: Unless the war has considerably changed the attitude of the newspapers in South Carolina, you are going to have considerable difficulty. I have never approached them in regard to stopping advertisements, but some two years ago I tried something of the kind, and they will not allow us to bring our lecture before the people because much of their income comes from these patent medicine people.

DR. TAYLOR: Mr. President, if the State Health Officer, of Louisiana, can have this advertising eliminated, and Texas can do it,—isn't it up to Dr. Hayne?

DR. HAYNE: That being the case, the State of South Carolina is going to pass such a law at its next legislature. (Applause.)

DR. EDGERTON: Mr. President, I believe there is an officer from the Surgeon General's office that is there for the good of the camp,—Lieutenant Smith—who is trying to work this proposition out, so far as the good of Columbia is concerned; but I believe this proposition could be best handled, not by the local men of the State of South Carolina, because the newspapers think quite a bit is due to jealousy, or to the fact that these men are probably getting money that we might get. They do not think of the

man paying out the money. The Surgeon General's office, through the Chamber of Commerce in this State could eradicate this evil very easily, I believe, particularly in these cantonments,—through the chambers of commerce and the business men of the cities this thing could be remedied. I believe a very active campaign could be undertaken, and inside of thirty to sixty days the advertisements would be discontinued from any local papers, because the Columbia paper has said any time the State stops it they will stop.

DR. BLACK: If you start a campaign to get a bill passed you have got to have some proof that these men are a nuisance. Now these men practicing around the cantonments when the soldiers come to the doctors and tell them they have been fleeced, get an affidavit and start this campaign and get a bill passed in the legislature; or we might use these as counter-advertisements in the papers, to offset their advertisements.

DR. TIMMERMAN: The great advertisers—the preachers of the gospel, the religious newspapers, and the drug-stores, are they subject to control by the State Board of Health or not? If not, why not?

DR. HAYNE: Each year we have introduced into the legislature the subject of passing a law limiting the alcoholic contents of patent medicines. That has not been passed, so far.

In regard to the religious newspapers, they seem to be harder to deal with. Practically all denominations are well represented by their newspapers—their church papers—and each one carries from twenty to thirty advertisements of patent medicines, from Wine of Cardui, up and down, and I understand there is more trouble with the religious newspapers than

any of the others. Texas has recently passed a law making it a misdemeanor to print any advertisement which has anything to do with the treatment of venereal disease.

THE SECRETARY: There were some resolutions last year sent up from Lee County. I will read the resolutions.

RESOLUTIONS—

These resolutions were first presented to the district association in which this county is located, and reported upon adversely. This committee reported as follows:

This has been held over until this year for further action.

Moved and seconded that the majority report be adopted. Motion carried.

THE SECRETARY: Here is a memorial from the Pee Dee Society:

DR. MAY: I move that we adopt that resolution; that the date be changed until June or July, to be decided on later.

DR. LYNCH: Mr. President, as far as the inclemency of the weather goes, I could not imagine more inclement weather than the time specified in the resolution. It appears to me it would be much better for the Association to limit its meeting to a shorter time than we now occupy. At present it is three days. That means more than three days of absence. Consequently the last day is very poorly attended. Usually those who have papers to read on the last day are somewhat disgruntled at not being able to read their papers, or having to read them before such a small audience.

DR. HARMON: I think it would be a mistake to change the date, because in June, July or August many of the men are away from home. It is very uncomfortable and crowded up in the hotels or small homes. It would

be very disagreeable. I think it would be decidedly out of the way to change the date.

THE SECRETARY: This matter has been threshed out by almost every state in the Union. So far as June is concerned that conflicts with the A. M. A. Most states have their meetings this month. Many of them conflict right now. Preceding members of this body have, I think, worked this matter out to a most satisfactory solution, and I have read the proceedings of other states where they have attempted to change, and some did change and went back to the former time of meeting, and I think the present date is the best time to have it.

Moved that the resolution be tabled.

Motion carried.

DR. WYMAN: I move that we send telegrams to the Georgia and the South Carolina Medical Societies which are now in session.

Motion carried.

DR. BAXTER HAYNE: Is there not some way we could cut out some of this regular order of business, or condense the thing somewhat, and just have the meeting two days instead of three? It takes a day to get here and a day to get away, and three days here. That practically takes in the week.

DR. WYMAN: I would offer the resolution that the house of delegates be required to finish its duties by Tuesday afternoon, and the scientific session be called to order at the evening session, and the entertainments be eliminated.

THE SECRETARY: The doctor has brought up a resolution that the A. M. A. has made use of. For in-

stance, all of the preliminaries of the actual scientific meeting,—the addresses, etc., they did that last year—could be had in the evening of the day of house of delegates' meeting; cut out the smoker and get in that much time and start on the scientific program early next morning, and possibly get through with it in one day, next year. That is what the A. M. A. did last year. I, personally, would not like to see all the social features cut out of the Association.

DR. HAYNE: Mr. President, it seems to me the doctors like to get together in a social way as well as a scientific feast. Now we have very little pleasure and very much science.

DR. POLLITZER: I would like to offer the resolution that the meetings of the Association hereafter last only two days.

DR. TRIPP: Isn't it on the by-laws how we shall proceed to conduct our meeting? Anything presented at this meeting would have to be presented in writing and voted on a year from now.

THE PRESIDENT: It specifies the meeting of the house of delegates and the scientific meeting. It does not say how long it will last.

Motion put, seconded and carried, that the meetings in the future occupy but two days.

THE SECRETARY: Mr. President, I understand, now, that we are to have only two days hereafter?

THE PRESIDENT: Two days.

THE SECRETARY: I make this motion: That the preliminary exercises of the State Medical Association take place on the afternoon or evening of the day on which the house of delegates convenes; the welcoming addresses, etc.

PLACE OF MEETING.

DR. LANCASTER: As Columbia is the center of the State I move that this Society meet next year in Columbia.

THE PRESIDENT: I invite the Society to Florence.

DR. HARMON: We would be pleased to have you, but there is absolutely no place to entertain you at the present time. Columbia is crowded and no place to entertain you.

DR. HINES: We had a very pleasant time at Florence when the Society met there last, and I move that we go to Florence.

Motion carried.

Adjournment.

REPORT OF DELEGATE TO AMERICAN MEDICAL ASSOCIATION.

As your delegate I attended the meeting of the House of Delegates in Hoosak Hall Academy of Medicine Building, New York City, June 4th, 1917. This was the first meeting of that body to be held under the new regime of a special Chairman and devoting the first two days of the week to the business of the Association, practically completing it before the scientific sessions began. I may say in passing, that our State Association was probably the first organization to follow this plan, which has now been adopted by the national organization as well as some of the states.

Dr. Hubert Work made an ideal chairman and the business of the House was facilitated by his ability as a parliamentarian. The report of the Secretary showed membership of constituent state associations to be 81,851 and the fellowship to be 44,010, both figures being an increase.

The report of the Treasurer disclosed some loss in printing expenses of the Association and Journal for the first time in twenty-five years, owing to the enormous increase in the cost of paper and printing. The increase in the cost of paper was \$54,000 and the estimate cost for 1917 \$170,000 with the supposition that in 1918 this cost would be further increased. The American Medical Association therefore has been obliged to resort to a rigid economy along all lines, though there is no cause for alarm. The total assets of the Association approximated half a million. Owing to war conditions and the necessity for economy the great work of the Council on Health and Public Instruction has been considerably curtailed, yet a vast amount of printed matter is sent out by this department. More than one million pamphlets alone being distributed last year. Under this head was presented by Dr. Alexander Lamberti, Chairman of the Social Insurance Committee, the most exhaustive report ever compiled on Health Insurance in all countries and a summary of our duty in the matter. In brief, the committee suggested that these studies be continued and that the Association co-operate with all agencies looking toward the moulding of laws in the interest of the community and the profession and to insist that such legislature shall provide for freedom of choice of physician by the insured, payment in proportion to the amount of work done. This council called a meeting October 16, 1916, of all the representative organizations in the interest of child welfare in America at the Chicago office by mapping out procedures for the conservation of child life during the war.

The Council of Medical Education through its Chairman, Dr. Bevan, re-

ported that at last as a result of extraordinary work for many years, that the best medical schools of America now furnished as good an all-round medical education as is being furnished by the medical schools of either Germany or Great Britain.

Perhaps no action of the House has been more widely quoted than that in reference to the alcohol question in the following resolutions:

Resolved, that the American Medical Association opposes the use of alcohol as a beverage and that the use of alcohol as a therapeutic agent should be discouraged.

The President, Dr. Charles H. Mayo, in his presidential address places himself on record as being fully in accord with the spirit of these resolutions. Much of his address was devoted to the problems confronting the American Profession in connection with the war.

Your delegate served on the very important committee of reports of officers and acted as teller during all elections held by the House.

The attendance, the meeting being in New York City was around the five thousand mark. The local profession had provided a most interesting program of clinics which alone attracted many physicians.

The various patriotic meetings, especially the one held at the Hippodrome on Wednesday evening, June 6th, left no doubt in the minds of those present that the American profession stands ready to uphold the government in this most righteous war.

The next meeting will be held in Chicago, June 10th to 14th under the Presidency of Dr. Arthur D. Bevan who has done so much for American Medical Education.

Respectfully submitted,
E. A. Hines, M. D.



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(1941)

BOOK REVIEWS

EMERGENCIES OF A GENERAL PRACTICE BY NATHAN CLARK MORSE, A. B., M. D., F. A. C. S.

Surgeon to Emergency Hospital, Eldora, Iowa; District Surgeon Chicago Northwestern Railway, Minneapolis & St. Railway; Ex-President Iowa State Association of Railway Surgeons; Ex-Vice President Pan-American Congress; Fellow American Medical Association; Member of The Society of Clinical Surgeons of North America; Author of "Post Operative Treatment."

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This is an excellent book which will serve the General Practitioner in solving many a knotty problem.

THE ELEMENTS OF THE SCIENCE OF NUTRITION. Third Revised Edition, Enlarged.

The Elements of the Science of Nutrition. By Graham Lusk, Ph. D., Sc. D., F. R. S., (Edin.), Professor of Physiology at Cornell Medical School, New York. Third Edition, Reset. Octavo of 641 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1917. Cloth \$4.50 net.

This is one of the most authoritative books ever published in this country. The whole subject is of great importance at this time.

MEDICAL CLINICS OF NORTH AMERICA. (The Chicago Number.)

THE MEDICAL CLINICS OF NORTH AMERICA. Volume 1, Number 5 (The Chicago Number, March, 1918). Octavo of 241 pages, 35 illustrations. Philadelphia and London: W. B. Saunders Company, 1918. Published Bi-Monthly. Price per year: Paper, \$10.00; Cloth, \$14.00.

Among the articles in this issue are the following:

Clinic of Dr. Fredrick Tice, Cook County Hospital. Epidemic Respiratory Infection.

Clinic of Dr. Frank Wright, Michael Reese Hospital. Nephritis.

Clinic of Dr. Ralph C. Hamill, Northwestern University Medical School. Insomnia and Hysteria

Clinic of Dr. Isaac A. Abt, Michael Reese Hospital. (Sarah Morris Memorial Hospital for Children.) Asthma in Children.

A TEXT-BOOK OF OBSTETRICS. The New (8th) Edition.

A Text-Book of Obstetrics. By Barton Cooke Hirst, M. D., Professor of Obstetrics in the University of Pennsylvania. Eighth

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Chicago

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edition, revised and reset. Octavo of 863 pages, with 715 illustrations, 38 of them in colors. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$5.00 net.

This continues to be one of the most popular text-books as well as very valuable reference work for the busy doctor.

ORAL SEPSIS In Its Relationship to SYSTEMIC DISEASE By WILLIAM W. DUKE, M. D., Ph. B., Kansas City, Mo.

Professor of Experimental Medicine in the University of Kansas School of Medicine; Professor in the Department of Medicine in Western Dental College; Visiting Physician to Christian Church Hospital; Consulting Physician to Kansas City General Hospital, Kansas City, Mo., and to St. Margaret's Hospital, Kansas City, Kansas.

WITH 170 ILLUSTRATIONS,
St. Louis,
C. V. MOSBY COMPANY,
1918.

31ST. ANNUAL REPORT of INTERSTATE COMMERCE COMMISSION. DECEMBER 1, 1917.

Washington Government Printing Office.
1917.

INTERPRETATION OF DENTAL AND MAXILLARY ROENTGENOGRAMS By ROBERT H. IVY, M. D., D. D. S.

Major, Medical Reserve Corps, United States Army; Associate Surgeon, Columbia Hospital, Milwaukee; Formerly Instructor in Oral Surgery, University of Pennsylvania.

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COMBINATION: A student may enter the regular Freshman class on 14 units and attend the College of Liberal Arts for two years, after which he will be admitted to the Freshman Medical Class, and upon the completion of his Sophomore year in the Medical College, can obtain the degree of Bachelor of Science, gaining his M. D. degree after another two years at the Medical College.

INSTRUCTION: Thorough laboratory training and systematic clinical teaching are special features of this institution. The faculty is composed of 106 professors and instructors, twelve of whom are full-time salaried men.

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HOSPITAL FACILITIES: The Grady (municipal) Hospital of 250 beds is in charge of the members of the medical faculty during the entire college session, and the Senior Students (in small sections) are given daily clinical and bedside instruction there. In the near future, work will begin on the new Wesley Memorial Hospital (of 200 beds) at a cost of not less than \$200,000.00, which will be erected on or near the site of the present Medical College. The wards of this hospital, when completed, will be under the complete control of the faculty for teaching purposes. The J. J. Gray Clinic, which has just been completed at a cost of \$75,000.00 affords ample accommodations for this large clinic, and excellent facilities for clinical instruction.

RATING: This college is rated as a Class A Medical School by the Council on Medical Education of the American Medical Association and is a member of the Association of American Medical Colleges.

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The Journal OF THE South Carolina Medical Association



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Annual Subscription, \$2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.

J. H. GIBBES, M. D., Columbia, S. C.

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R. M. POLLITZER, M. D., Charleston, S. C.

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PUBLIC HEALTH.

J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.

E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

VOLUNTEER MEDICAL SERVICE CORPS

Statement by Dr. Franklin Martin,
Member of Advisory Commission
and Chairman of General Medical
Board, Council of National Defense

FOREWORD

The Volunteer Medical Service Corps was authorized by the Council of National Defense on January 31, 1918. Under this authorization the membership of the corps consisted of all physicians who because of overage, physical disability, dependents and es-

sential home needs were not eligible for service in the Medical Reserve Corps of the Army or Navy.

Enlarged Scope of the Organization.

On August 5th the Council of National Defense authorized a change in the scope of the organization and an increase and amplification of its Central Governing Board. Membership in the Corps as now authorized, makes eligible to the Corps every legally qualified physician, including women physicians, holding the degree of Doctor of Medicine from a legally chartered medical school, without reference to age or physical disability, provided he or she is not already commissioned in the Government Service. This organization has now the approval of the President as indicated in the following letter.

The White House, Washington,
12 August, 1918.

My dear Dr. Martin:

I have received your letter of August 5, laying before me the matured plan for the reorganized Volunteer Medical Service Corps, of which you ask my approval. This work was undertaken by you under the authority of the Council of National Defense; it has had great success in enrolling members of the medical profession throughout the country into a volunteer corps available to supply the needs of the Army, Navy and Public Health Service. In co-operation with the General Medical Board of the Council of National Defense, the strong governing board of the reorganized corps will be able to be of increasing service, and through it the finely trained medical profession of the United States is not only made ready for service in connection with the activities already mentioned, but the important work of the Provost Marshal General's Office and the Red Cross will be aided and the problems of the health of the civilian communities of the United States assured consideration. I am very happy to give my approval to the plans which you have submitted, both because of the usefulness of the Volunteer Medical Service Corps and also because it gives me an opportunity to express to you, and through you to the medical profession, my deep appreciation of the splendid service which the whole profession has rendered to the nation with great enthusiasm from the beginning of the present emergency. The health of the Army and Navy, the health of the country at large, is due to the co-operation which the public authorities have had from the medical profession; the spirit of sacrifice and service has been everywhere present and the record of the mobilization of the many forces of this great Republic will con-

tain no case of readier response or better service than that which the physicians have rendered.

Cordially and faithfully yours,
(Signed) WOODROW WILSON.
Dr. Franklin Martin,
Advisory Commission,
Council of National Defense.

At a meeting of the Central Governing Board, held on Friday, August 2, it was moved by Dr. Sawyer, seconded by Dr. Martin, that the Central Governing Board shall consist of the present Central Governing Board (excluding Sherk, Bradford, and Brophy) and others as follows:

Surgeon General William C. Gorgas,

U. S. A.

Surgeon General William C. Braisted,
U. S. N.

Surgeon General Rupert Blue, U. S. P.
H. S.

Provost Marshal General E. H. Crowder

Dr. Franklin Martin, Chairman of
Committee on Medicine and Sanitation,
Council of National Defense.

Dr. Edward P. Davis, President, Volunteer Medical Service Corps.

Dr. John D. McLean, Vice President.

Dr. Charles E. Sawyer, Secretary.

Admiral Cary T. Grayson, U. S. N.

Dr. F. F. Simpson.

Dr. Frank Billings.

Dr. H. D. Arnold.

Mr. W. Frank Persons—Red Cross.

Dr. Victor C. Vaughan.

Dr. William H. Welch.

Dr. Robert L. Dickinson, Chief of
Staff's Office.

Colonel R. B. Miller, U. S. A., Chief of
Personnel Division.

Surgeon R. C. Ramsdell, U. S. N.,
Chief of Personnel Division.

Colonel James S. Easby-Smith, Executive Officer.

Dr. Joseph Schereschewsky, Assistant Surgeon General (Personnel).
 Dr. C. H. Mayo or W. J. Mayo.
 Dr. William Duffield Robinson.
 Dr. George David Stewart.
 Dr. Duncan Eve, Sr.
 Dr. Emma Wheat Gilmore.

GENERAL PLAN

The Volunteer Medical Service Corps is exactly what its name indicates. It is a gentleman's agreement on the part of the civilian doctors in the United States who have not yet been honored by commissions in the Army and Navy, and a representative board of governors consisting of officials of the Government associated with lay members of the profession, in which the civilian physician agrees to offer his services to the Government if required and asked to so do by the Governing Board.

It is a method of recording all physicians who are not yet in service and classifying them so that their services when required will be utilized in a manner to inflict as little hardship on the individual as possible. It is a method by which every physician not in uniform will be entitled to wear an insignia which will indicate his willingness to serve his Government.

As more than sixty per cent of the physicians of the country will be utilized in caring for the industries at home and the health of the home people, this large percentage of necessity will be expected to maintain their home status and continue their ordinary professional work.

STATE COMMITTEE VOLUNTEER MEDICAL SERVICE CORPS

The following State Committee has been appointed to act in connection with the immediate enrollment of the physicians of South Carolina in the Volunteer Medical Service Corps: Dr. T. Grange Simons, Charleston, Chairman; Dr. E. A. Hines, Seneca, Secretary; Dr. J. A. Mood, Sumter; Dr. R. A. Bratton, York; Dr. G. A. Neuffer, Abbeville; Dr. W. F. R. Phillips, Charleston.

COUNTY REPRESENTATIVES APPOINTED TO ENROLL EVERY LEGAL PRACTITIONER IN VOLUNTEER MEDICAL SERVICE CORPS

Abbeville County: Dr. J. A. Anderson, Antreville, S. C.

Aiken County: Dr. Harry Wyman, Aiken, S. C.

Anderson County: Dr. J. R. Young, Anderson, S. C.

Bamberg County: Dr. J. S. Matthews, Denmark, S. C.

Barnwell County: Dr. D. K. Briggs, Blackville, S. C.

Beaufort County: Dr. M. G. Elliot, Beaufort, S. C.

Berkeley County: Dr. W. K. Fishburne, Pinopolis, S. C.

Calhoun County: Dr. A. R. Able, St. Mathews, S. C.

Charleston: Dr. F. L. Parker, Charleston, S. C.

Cherokee County: Dr. J. T. Darwin, Gaffney, S. C.

Chester County: Dr. W. M. Love, Chester, S. C.

Chesterfield County: Dr. Theo. Wanamaker, Jr., Cheraw, S. C.

Clarendon County: Dr. W. M. Broekington, Manning, S. C.

Colleton County: Dr. L. M. Stokes, Walterboro, S. C.

Darlington County: Dr. George B. Edwards, Darlington, S. C.

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Fairfield County: Dr. Samuel Lindsay, Winnsboro, S. C.

Florence County: Dr. W. S. Lyneh, Seranton, S. C.

Georgetown County: Dr. W. E. Sparkman, Georgetown, S. C.

Greenville County: Dr. Davis Furman, Greenville, S. C.

Greenwood County: Dr. R. B. Epting, Greenwood, S. C.

Hampton County: Dr. J. L. Folk, Brunson, S. C.

Jasper County: Dr. W. A. Preacher, Ridgeland, S. C.

Horry County: Dr. H. H. Burroughs, Conway, S. C.

Kershaw County: Dr. J. W. Corbett, Camden, S. C.

Lancaster County: Dr. E. C. Brasington, Kershaw, S. C.

Laurens County: Dr. T. L. W. Bailey, Clinton, S. C.

Lee County: Dr. R. O. McCutcheon, Bishopville, S. C.

Lexington County: Dr. J. J. Wingard, Lexington, S. C.

McCormick County: Dr. W. A. Hunter, Troy, S. C.

Marion County: Dr. Z. G. Smith, Marion, S. C.

Oconee County: Dr. E. C. Doyle, Seneca, S. C.

Orangeburg County: Dr. P. A. Phillips, Springfield, S. C.

Pickens County: Dr. L. G. Clayton, Central, S. C.

Richland County: Dr. William Lester, Columbia, S. C.

Saluda County: Dr. S. M. Pitts, Saluda, S. C.

Spartanburg County: Dr. J. J. Lindsay, Spartanburg, S. C.

Sumter County: Dr. H. M. Stuekey, Sumter, S. C.

Union County: Dr. W. H. Hope, Union, S. C.

Williamsburg County: Dr. A. O. Eaddy, Johnsonville, S. C.

York County: Dr. W. W. Fennell, Rock Hill, S. C.

Marlboro County: Dr. C. R. May, Bennettsville, S. C.

Newberry County: Dr. W. G. Houseal, Newberry, S. C.

ORIGINAL ARTICLES

PEDIATRIC CASE REPORTS

By R. M. Pollitzer, M. D., Charleston, S. C.

I am about to present to this Association records of several cases treated during the past year. You will find nothing that is startling or new, but simply a collection of notes concerning the clinical aspect of several varied pediatric conditions. Though, for all the histories except the first, I could furnish duplicates, I have omitted them, so as not to consume too much time. All feeding cases, of which I have quite a collection, have also been excluded as not interesting except to the pediatrician.

Case 1. E. B.—W. F. age 9 mos. Referred by Dr. K. This baby a native of Georgia, had always been well except for present condition. Fam. Hist. neg. Breast-fed. Phys. Exam.: Large protruding tongue, nose flat, and obstructed. Fat pads present, ant. fontanel quiet large. Hands slightly trident shaped. Liver and spleen not felt. No teeth. Skin rough. Sees and hears. Fundi normal. Weight 15½ lbs. Marked retardation of mental and physical development. May 28, '17. Diagnosis: Cretinism. Treatment: thyroid ext. gr. ¼ t. i. d. June 2. Mother notices some mental improvement. R/ thyroid 4. i. d. June 10. Has 1 tooth. Brighter. R/ thyroid gr. ½ 4. i. d. June 15. 10 mos. Extended arms to me. Thyroid gr. 1. t. i. d. June 26. Can almost sit unsupported. Brighter and more active.

At the time after giving the mother full instructions and explaining the need of watching for the signs of hyperthyroidism, the patient returned home. From then on I heard frequently, at first weekly, later once a month. The reports covered many pages and were remarkably clear. Improvement was continuous though at times slow. The dose was frequently increased. My last letter was received March 14, '18. The following is a summary: age 19 mos. Weight 20 lbs. Height 30½ in. She has 11 teeth, some of which are large and irregular. Walks in baby walker. Strikes notes on piano and enjoys music. Says many words. Takes off shoes and stockings, and tries to put them back on. Facial expression practically normal. Said by strangers to look and act like normal child. Taking 10 grs. of thyroid extract daily. At times dose decreased or drug stopped, because of diarrhea or nervousness. The mother writes that the improvement has been wonderful. Here we have then a case of congenital athyreosis, recognized early enough to be amenable to treatment. Anybody can obtain the same results if backward children are studied with this condition as a possibility always in view, if the case is recognized early enough, and the treatment be pushed.

Case 2. L. A.—Age 6 weeks. (Date June 10, '17. Referred by Dr. M.) W. F. Fam. Hist: Parents well, two other children, well, none dead, no miscarriages. Tuberculosis and syphilis not admitted. The baby was full-term, normal delivery, and is breast-fed. History of present illness: not well since birth. Has always had noisy

obstructed nasal breathing. For past few days cries most of time. Seems to be in pain. At times is bluish. Cries especially on being moved, and whenever the hands or feet are touched. For two days has not moved hands or feet. Physical examination showed several small indurated red palmar and plantar papules, the palms being cracked and dry. Heart and lungs negative, liver quite large, spleen not felt. Radial epiphyses markedly swollen and very painful to touch. Baby small, weak, and looks ill. Diagnosis: Syphilitic pseudo-paralysis (Parrot). Treatment: Ung. Hydrargyri.

June 20. Looks better, moving hands and feet a little. Crying less. June 27. Moves arms and feet normally, cries very little. Swelling of epiphyses has almost disappeared. Laughs. July 1. Appears in every way to be perfectly well. March 25. 11½ mos. 22 lbs. 7 teeth. Says a few words, and is able to stand holding on. She is a healthy, well developed baby. At the cessation of the acute stage of syphilis the ointment was discontinued, and she was put on "gray powder", since which time it has been given daily, for three out of every four weeks. Clinically she is well, but as the Wassermann as yet has not been made, I cannot forecast the future course.

Case 3. J. C.—White male. Age 7 mos. Referred by Dr. J. Date, September 11, '18. The boy is one of twins. Family and past history are negative. He has always been in splendid health. This morning at 10 o'clock severe abdominal pain suddenly occurred. This eased, but considerable prostration and pallor were noted. After the introduction of a glycerin suppository at 3 o'clock, some bright red blood was passed from the bowel. During this time he vomited

twice. Physical examination: Well developed and well nourished boy. Abdomen: no rigidity, tenderness or distention, no fluid made out. Liver slightly below costal arch, spleen not palpable. On the left side, below the umbilicus is a fairly large sausage-shaped mass, which is freely movable. Diagnosis: Intussusception. Treatment: Taken at once in automobile to a hospital and operated upon by Dr. J. at 5 p. m., seven hours after occurrence of accident. Mass found not on left but low on right side (cecum). Gut was bluish, but normal color returned after reduction, which was accomplished easily. Good ether recovery. Taken back home one-half hour after laparotomy. September 12. General condition good. Temperature 101, pulse 130. A little old blood passed. No vomiting. Next day: taking breast, bright-looking and playful. September 18. T. P. and respiration normal. Aside from slight loss of weight as well as before the condition happened. This type of bowel lesion in the child offers an excellent prognosis if taken in hand early enough.

Case 4. E. J.—White female. Age four months. Residence Moneks Corner. Date, September 17, '17. Fam. Hist.: Parents well, one other child in good health, no miscarriages. Past history: Full term, normal delivery, breast-fed q. 2. h. and 1 at night. No previous illness. History of present condition: A week ago because of exposure to diphtheria, was given antitoxin. Since then has been feverish and irritable. No eruption, chills or convulsion. Mother thinks teething is cause of malady, father blames antitoxin. Physical examination: Negative except for marked pallor and fever along with barely palpable spleen and rather large liver. No spec of urine obtainable then. Blood-smear shows heavy malarial infection of vivax type;

the average oil immersion field having ten to fifteen parasites and many red cells containing two or three plasmodia. Diagnosis: MALARIA (tertian). Treatment: Quinine bisulphate gr. $7\frac{1}{2}$ daily by mouth. September 22. Skin less pallor, spleen still palpable. No vomiting or diarrhea. Urine shows a few motile bacteria and occasional pus cell. Quinine reduced to 5 grs. daily for next four days. October 7. Report by letter states that baby is doing well, has a good color and is gaining weight. Although a few congenital cases of malarial infection have been reported, yet this is the earliest proven case that has come under my observation. It might have been well to have given treatment hypodermically, but the parents did not remain in town, and large doses by mouth at this age are remarkably well tolerated. Malaria in infancy and childhood is fairly common and sometimes overlooked.

Case 5 J. E.—White female of 16 months. Referred by Dr. M. January 20, '18. Undiagnosed. Family and past history: Mother died from effects of labor seven months after birth of daughter, father said to be in bad health. At five months patient had several convulsions. At ten months said to have had meningitis. Has never walked or talked, but can stand. Only seven teeth. Diet: Boiled cows milk with sugar and water. History of present illness: Since yesterday has been rigid and the hands and feet held firmly in extension. Physical examination showed characteristic carpo-pedal spasm. Chvostek's sign, and evidences of rickets. Temperature elevated. Diagnosis: Tetany and rickets and backwardness. Treatment: Calcium lactate in large doses and sodium bromide p. r. n. Milk discontinued. January 21. General condition about the same except that early

this morning a general convulsion occurred. January 22. Another convulsion but of shorter duration. January 23. Very little tendency to spasm now. The following day apparently well. When seen a week later there had been no recurrence of tetany. April 2, '18. Upon being summoned hastily, I found the child dead, with the hands in the characteristic attitude. The story as I gathered it was that she had had a return of the malady a few days prior and that on this morning, she had a severe general convulsion in which she died. Tetany per se offers a good prognosis, but the possibility of a convulsion being fatal should always be kept in mind.

Case No. 6. J. T.—White male of seven months. Called in consultation by Dr. R. February 22, '18. Family history of no bearing on case. There are two other children in good health. Past history: Full term, normal delivery, breast-fed. Has never been sick before. Two days ago returned from Norfolk. On train something noticed to be wrong with infant. Physical examination: Well developed and nourished, skin hot and photophobia present. Considerable cerebral irritation and general hyperesthesia apparent. Spleen easily palpable and slight macular eruption seen. Lumbar puncture done at once, gen. anesthesia. Spinal fluid came out under pressure, quite cloudy. Cell count 3,000 (estimated), nearly all being polymorphs, many intra—and extracellular gram-negative diplococci present, globulin positive, sugar negative. 15 e. e. antimeningoococcal serum (P. D.) given intraspinally by gravity, a few hours later. Patient transferred to hospital. February 23. Lumbar puncture done with no difficulty, fluid so thick that it could scarcely flow, only about 2 e. e. obtained. No serum put in. Case in very

poor condition. Later 8 e. c given intravenously (scalp vein) During the day the babys condition became desperate, and spinal puncture was done twice again but was almost jelly-like and no serum could be given. At night the lateral ventricle was tapped by Dr. R. but no fluid withdrawn. Since entrance stimulation had been accomplished by digitalis, camphor and eaffein. Morphia and gr. 1/100 sod. bromide gr. 2. p. rn. were also given for nervous symptoms. Throughout the day the infant was pulseless most of the time, and the temperature ranged from 105 to 106. At 11 p. m. edema of the lungs set in and death occurred the following morning at 4. This is a record of an extremely severe and short course. The diagnosis was simple and the therapeutic indications clear, but because of the influence that early age has on this infection the out-look was hopeless from the onset. In another case of meningococcic meningitis which I assisted in treating about two months prior, the age was eleven months, but the duration of the illness was over two weeks, during which time 180 e. c. of serum was given intra-spinally, but without avail.

of a certain frequently appearing camouflage covering an attack of the infant-ry; if we may be so bold as so to say in this such rare and grave and austere atmosphere.

Hard and heavy though the care of even the well infant may be, we have no place here for a discussion of him in so happy a state, but shall confine ourselves to a passing observation of some of his little semiological peculiarities when he seems fairly to take it into his small head to mislead us in the study of what ails him.

It seems meet and right to say, however, that like as not it is really not so much a question of what is the matter with the baby as what is the matter with the doctor. And having gotten this far we may, with due diffidence, say that we shall here turn our attention to certain well-known but often well-disguised clinical manifestations occurring in conjunction with certain vagaries in, of, and appertaining to the middle ear and mastoid region of the child and too often hiding themselves from the sympathetic recognition of the attending practitioner. Let us review briefly a few typical cases, commanding a good perspective, rather than to invite a mental indigestion with a soporific plethora of detail.

First, here is a baby, fourteen months old. For two or three days he has been irritable and fretful. He is feverish and has lost his appetite, and his bowels are not acting normally. Mother sends for the family doctor. He arrives and finds the baby with a coated tongue; perhaps the nose is running a little; the abdomen is somewhat tense; temperature 101 F., pulse 120; no movement of the bowel in past thirty-six or forty-eight hours.

“Ah, a slight cold; nothing to worry about. It is extraordinary, my dear Madam, how a little cold can upset a child of this age. A few broken doses

SOME ASPECTS OF MIDDLE EAR AND MASTOID INFECTION IN CHILDREN

By J. W. Jervey, M. D., Greenville, S. C.

The baby was well, and well a care
would he be;
The baby was sick—a hell of a care
was he!

Thus may we paraphrase an ancient rhyme and so prepare ourselves for a brief, but philosophical consideration

of calomel and he will quickly come around."

So quoth the good doctor. And we may agree that the treatment is good so far as it goes. However, the baby does not "come around"; but the doctor does next day, and the next, and the next. Oh, why does not the good doctor note the little whimpering cry, punctuated by an occasional scream that speaks of continued pain somewhere? Why does he not see the anxious expression on the piteous little face? Why has he missed the significance of the sniffling nose and the open mouth? Why has he not seen the little hand reach up and pull at the affected ear?

And then one morning to his deep chagrin, the mother tells the doctor that the abscess in the baby's ear broke during the night. Then he calls the otologist, if he is really a good and wise doctor, for the management of these cases is not always simple, and serious complications may be developing, but how much pain and how much danger would have been avoided if this practitioner had made it his rule to look carefully in the ears of every child, or have them looked into, in every case where he is not absolutely positive of his diagnosis.

High on The Avenue, in the lap of Upper-Ten-dom, the very chrysalis of an encapsulating luxury, dwells a pale and sad-faced, ricketty looking little kid of five years (Another just like him lives away over in Possum Kingdom, on the very edge of town, but one hardly has time today to give him a careful examination and attention). This little scion of wealth and position has been more or less ill for six months. He has a "trace" of albumen in his urine; a variable temperature, and a little heart lesion that keeps murmuring "Endocarditis" into the doctor's stethoscope. It is true that the tonsils

are not above suspicion, and there is probably an adenoid, but the child's luxuriating parents have an ingrained aversion to operative procedures, and of course their feelings must be tenderly regarded. It is also true that one ear has been discharging pus at intervals for months, but these attacks always yield to a few days or weeks of assiduous attention, so why be alarmed!

The doctor knows full well that a focal infection in the ear, or anywhere else, can readily start up a nephritis, an endocarditis, an arthritis, and a whole train of organic and dangerous disturbances, but in this particular case this ear—why for long periods at a time it gives no trouble at all, with only an occasional little touch of ear-ache, and from time to time a discharge which, as we have seen, is more or less easily controlled.

And then, one night about ten o'clock, the fireworks commence. Rigors, real rigors, and a bounding temperature varying from 99 to 106; pulse 160; pain that needs no questioning to elicit its presence; perhaps nausea and vomiting. After so long a time the otologist is called into consultation; a diagnosis is made of sinus thrombosis, or meningitis complicating intracranial abscess of otic origin, or so forth; and a difficult operation with a high mortality rate must be performed at once. It could have been avoided. I am not drawing unusual types; I am not drawing on my imagination, I am merely drawing the attention of an intelligent body of technical men to a condition that everyone of you knows is of frequent and far too frequent occurrence.

Over on the other side of town lives a pretty little golden-curled girl of six summers. Up to two or three months ago, she was the picture of a sweet and healthful vitality. Then she had

a bronchial asthma, and a mean little cough developed with a low running, eontinued, and slightly varying temperature.

The good doctor looked, with the aid of a tongue spatula and a flash light, into the little patient's throat, but saw nothing of importance to guide him. Widal was negative. He went earefully over the chest, but found nothing of importane. He could not be sure whether his tubereulin test was positive or not, but with the chronic eough, the embarrassed breathing, the eonstant temperature, the anorexia and slight loss of weight he made a tentative mind diagnosis of tuberculosis, and instituted treatment accordingly—of course with no result.

Three or four weeks later, or it might have been that many months—and when things were looking mighty blue, the little patient suddenly complained of a violent pain in the left ear. It was then remembered that she had had earache two or three times in her life, but old wives said that all children had to have earache some time, and little attention had been paid to it.

The oto-laryngologist was summoned, a double mastoiditis was discovered, operated on, and the ehild restored to health.

The good doctor had been long before on the verge of loeating the trouble when he looked at the throat, but he missed it, first, because the diseased tonsils were of the submerged type, not large, and lay entirely concealed in the tonsillar fossae until the anterior pillars were retracted and the patient made to gag; and next because he failed to find out whether or not there was an adenoid growth in the nasopharynx. Had he discovered either of these things he might have suspected ear infection, and the key to the seeret would have been within his grasp.

There are today, Mr. President, and doctors, frequent cases all over this State diagnosticated as atypical malaria, atypical typhoid, or para-typhoid, rheumatic fever, and so on, which are neither more nor less than middle ear and mastoid infections, leading to lateral or other sinus thrombosis, or other intraeranial complications of otic origin. It is not the function of this paper to point out the way of avoidance of these regretable errors. It is enough now to know that, admitting their existence, the eapable ones among us (and are we not all capable?) will make a strong effort in the future to eireunvent them.

“Ah”, we hear someone say, “can you beat these otolaryngologists? They know more now about diseases of children than the general praetitioner, or even the pediatricist!”

Not so, my friends. I enter a disclaimer. But they do know more about the diseased ears of children. It is the otologists' business to know not only that the diseased ear may effect organic and functional disturbances of distant and apparently unrelated parts of the human economy; but also he should and must know the why and the how of these effects—the etiology, the semiology, the pathology of the symptom complex—and, to erown his usefulness, the remedy.

It is, I believe, the intense desire of the otologist to further his usefulness by a closer eo-operation with the praetitioner and the pediatricist.

DISCUSSION

Dr. Kibler, Columbia: The Doector was very eloquent, and his words well chosen, but he was too long arriving at the point, as the whole question sums itself up into diagnosis and treatment.

If you have a patient the age of Dr. Jervey's patient, suffering with the same symptoms—slight temperature, etc., and occasionally the mother or father or other member of the family sees the child pulling its ear—the ear should be at once examined by the family physician, by the aid of an ear speculum, electrically lighted; and I wish to say here that every general practitioner should be able to distinguish between a normal and an abnormal eardrum. If he notices a redness or congestion, or bulging of the drum, he knows there is trouble and must act quickly himself by making a circular incision in posterior quadrant, or call in an ear specialist. Sometimes the color of the ear drum is misleading; for instance, it might have almost a normal appearance, so far as the color is concerned, and yet may be serious trouble in middle ear, as the pressure in the middle ear could cause an ischemia of the drum membrane, or even may become edematous; either of which would demand immediate attention. After seeing such an ear drum and making such an incision, as suggested, if the patient has not recovered in twenty-four or thirty-six hours, go further and have a leucocyte count made, and, if necessary, also an X-ray, to see if there could be a mastoid involvement, and in this way clear up the whole situation.

Dr. Wm. Weston, Columbia: Mr. President, Dr. Jervey's paper has certainly opened up a most interesting and important field of study. When we consider that in cool weather a child's troubles are apt to be of a respiratory nature, and the most frequent sequela of that is some disturbance about the ear, we can readily understand what importance this matter has.

As to the frequency of mastoid con-

ditions there, I do not think any of us at this time can predict with any degree of certainty just how frequently they are. We know there are a certain number of cases where you have an internal ear trouble preuceoeyte there, and you go in and find a well developed mastoid trouble. This may go on for months, but the point I want to lay special stress upon is that in all conditions following an internal abscess we should be on the lookout for internal ear trouble.

Dr. W. P. Porcher, Charleston: I wish to thank the doctor for his beautiful literary effort and delightful picture of suffering infants, but one thing I want to stress is that the auditory canal of a little child is very small and the inflammation makes it smaller still, so that one is apt to be fooled nearly all the time, and doesn't feel so bad about it, either, because sometimes it is no one's fault.

There is one thing that I have used with a great deal of success and I have seldom seen it laid stress upon, and that is the beneficial effects of black wash. It is very cheap. It is warmed and the ear is filled with it, and nine times out of ten it will cure a boil and prevent a crop of boils. I use it in the dispensary on account of its cheapness and get excellent results. Simply black wash, warmed and shaken and poured into the ear, and you will find the inflammation will disappear and the child will turn over and go to sleep and you will have no further trouble.

Dr. Pollitzer, Charleston: It has often been said, and it is probably true, that the sins of the average doctor are not those of omission, but of commission. I cannot recollect that I had ever looked at an ear drum when I graduated from the medical college.

Since then I have examined many. About 99 per cent of the ills of childhood are attended to by the general practitioner, and he goes over the cases pretty thoroughly, but does not look at the ear.

A few days ago I saw with a man a case illustrating this. After going over the patient and finding nothing abnormal, and as the symptoms suggested trouble in the ear, I asked him if he had looked at the ears. He said yes, but that the view was not very satisfactory. I know it was not, because he has no ear speculum and has never properly looked into an ear in his life. There was an otitis media and bulging ear drum.

I believe many troubles could be lessened by a man looking at the ear drum of a child. It is remarkable how many cases of measles, scarlet fever and diphtheria are treated throughout the course of the disease and the ear is never looked at. The parents do not know of the trouble and the child goes along and has unexplained rise in temperature, and finally the ear ruptures and the discharge is seen on the pillow. The family makes the diagnosis for the physician.

Dr. Wm. A. Boyd, Columbia: I certainly enjoyed the paper presented by Dr. Jervey, and inasmuch as there has been such a scourge of mastoiditis throughout the State, and particularly in my own locality, in the past year or so, I am sorry the doctor has confined his paper purely to mastoiditis among infants, because, in my locality, the adults have not escaped the disease. The question is an important one. All of us doing any practice see any number of children who eventually come to us with discharging ear. Those children have, perhaps, been seen by a physician and possibly some fading

rash has been put down as indigestion. I am familiar with most of the rashes and cannot diagnose the rash of indigestion. As a general rule I find after the rashes of indigestion disappear then the children often have a discharging ear. I would ask the physicians to impress upon the family of any patient every time a child develops an earache not to stuff the ear as full of grease as they can. If there is any time we are going to have serious trouble it is when we discharge these ear symptoms, and preventing a scar back of the ear by calling in the man in the beginning and allowing him to give suitable and scientific treatment, and not to treat by hot oil and greases.

TONSILLECTOMY WITH LOCAL ANESTHESIA

By Pinkney V. Mikell, M. D., Columbia, S. C.

When we take into consideration that more Tonsillectomies are done than probably any other operation, one needs not apologize for bringing to the attention of this Association any method of tonsillectomy that is an improvement over many methods now in vogue. The operation usually falls into two classes; removal by instruments of the McKenzie or Sluder type or by various methods of dissection. The method I am about to describe differs in several particulars from the operation as usually done and has advantages which I am sure will appeal to you. It is applicable not only in tonsillectomies done with local anesthesia, but also to those done under general anesthesia. It is applicable also to all sizes, all shapes, all conditions of diseased tonsils.

and 1/150 gr. Atropine, one hour before operation, he is then wheeled into operating room, placed in sitting position in straight chair facing operator, who uses direct or reflected light for illumination. Patient is now draped for operation. The tonsils, pharynx, post nasal space and whole buccal mucous membrane is swabbed twice with a 10% solution of cocaine at five minute intervals. Five minutes after the last cocaine application, each tonsil is injected with two drams of a half of one per cent solution of Novocain and Suprarenin. These injections are made at the upper, middle and lower pole; into anterior pillar, 1/16th, of inch from free border of same into the capsule of the tonsil.

After waiting three to five minutes, the operation is commenced. The base of tongue is depressed until the palatoglossus in anterior pillar is on stretch. A Matthews curved semi-sharp knife is inserted at base of tongue at lowest pole of tonsil, between anterior pillar and the tonsil swept up between anterior pillar and the tonsil, following the line of least resistance, over the upper pole downward between tonsil and posterior pillar to the original starting point. The upper pole now sags slightly downward and it is grasped by Perkins tonsil forceps, for first time and gentle traction downward made. The muscles are now gently separated from the capsule by flat side of knife making pressure first against the stylopharyngeus muscle, then the lateral constrictors and then the anterior pillar, until the organ just hangs from its lower point of attachment including the lymphoid tissue at base of tonsils. The operation can be completed with the knife, but an Eve snare thrown over this remaining attachment, makes a smoother wound with less tendency to bleed. An ice gargle is now used by patient, and if there is no bleeding,

the second tonsil is removed by the same technique.

After treatment consists in putting patient in bed, relieving his pain with ice coil to throat and Codeine P. R. N. After 24 hours he is allowed to go home and given an astringent gargle to be used at frequent intervals.

The advantages of this operation are: First, freedom from shock and toxic effects, making it specially suitable in kidney, cardiac and bronchial conditions in which a general anesthetic is contra indicated. Second, complete removal of the tonsil in its capsule, with lymphoid tissue at base of tongue and with minimum of traumatism. Third, small amount of hemorrhage. Fourth, short convalescence, patient usually leaving hospital in 24 hours.

DISCUSSION

Dr. Kibler, Columbia: I beg to differ with the essayist and base it on my own experience and observation. I have seen some of the best men from the Atlantic to the Pacific work, and know of but one way to do a thorough tonsillectomy, and that is to have the patient thoroughly anesthetized and do it once and for all. This one-minute operation possibly accounts for some of the cases I had last week who previously had been operated upon.

I pull my hat off to my good friends in Charleston, but must disagree with them in this minute operation. It is up to all of us now to do the operation thoroughly, so that there will be no recurrence or criticism by others, who now-a-days take pleasure in examining post-operative cases. Dr. Justice Matthews, late of the Mayo Clinic, in my opinion hardly has an equal in tonsillectomy under local anesthesia.

I was so enthused at the time that on my return home I tried it out thoroughly, and what you gentlemen are now doing I did a few years ago and have discontinued it as a whole. You cannot keep the patient from gagging and coughing in your face. You must pick your case. In cases where your patient is under good control you get along very well. There is only one contra-indication to general anesthesia —where you have an active tuberculosis or possibly nephritis. Even a heart lesion is not a contra-indication.

In the last two weeks I operated on two cases of marked endo-carditis, and those cases stood the operation beautifully and were under the anesthesia more than half an hour. Gentlemen, you cannot do a perfect job in one or two minutes. You may think you have removed the whole tonsil, but you will later be surprised to find tonsillar tissue remaining. Dr. Matthews, the gentleman just referred to, with a report of a thousand cases, showed something like eighteen per cent of secondary hemorrhage from twenty-four hours to five days afterwards.

When you ligate a vein or artery you are sure you have the hemorrhage under perfect control, and it is a great comfort to leave your patient knowing you will have no further trouble. You attend to any other of your professional duties with perfect ease of mind, or play golf if you are so inclined. Again, I say, it is a comfort to know that your patient is all right. Otherwise you might be called back to the hospital with annoying secondary hemorrhage.

Dr. Mikell is one of my best friends, and when I am absent from my office I trust him with my patients, and I hope he will not have the experience of Dr. Matthews as to secondary hemorrhage under local anesthesia. If I have a patient who has no just reason for refusing to take a general anesthe-

tic and insists on local anesthesia, I shall gladly refer that patient to Dr. Mikell, but, on the other hand, if the patient has an active tuberculosis or nephritis, I will operate myself under local anesthesia, as these are contra-indicated to general anesthesia, as I have stated before. Aside from these contra-indications, I prefer and insist upon a general anesthetic, as it is perfectly safe and you can do your work quietly and thoroughly. Ether is safe in the hands of a competent anesthetist, and I do not believe there is any more shock or ill effect to the patient than an injection of cocaine or like drugs which are mostly used in local anesthesia.

Dr. J. W. Jersey, Greenville: Mr. President, I enjoyed the Doctor's paper very much, especially as I have been using almost identically the same method for some time. The points he has indicated I think are nearly all that might be considered, but two or three could be brought out. One point I think he has not mentioned is the celerity with which the operation can be accomplished. Some time ago, in reading an article on tonsillectomy by a Cincinnati man, he made the statement that the average time for a tonsillectomy by local anesthesia was about seven minutes. I do these operations in my office, keeping the patient with his head elevated reclining for three or four hours, then allowing him to be carried home, with the attention of a nurse. My office nurse remarked recently that she thought seven, or eight minutes entirely too long a time; that she knew it had been done in my office in much shorter time, so she timed about fifty cases without my knowledge, and the shortest time was one minute, the longest time four minutes. The shorter the time the bet-

ter the patient gets on and the better the mental condition.

I use, usually, about 4 drams of a 1/4 of 1 per cent novocain, with 4 or 5 minims adrenalin chloride solution to be injected. This is enough for both tonsils and gives almost complete anesthesia and almost a bloodless field. Occasionally there is some slight hemorrhage, but not to be compared with the invariable hemorrhage encountered under general anesthesia, which is made worse by the capillary tension induced by the etherization, which we all have to contend with, and the patient, not being allowed to lose so much blood, is in very much better condition after the operation.

I hope that the method will be more widely used and thank Dr. Mikell for bringing it to our attention.

Dr. W. P. Poreher, Charleston: Gentlemen, I dislike to get on my feet so often, but I hope you will pardon me for speaking of the operations. I have seen fifteen children spread out on the floor at a time and I am satisfied it didn't take more than two minutes apiece.

The child is taken in the nurse's lap and given gas; one tonsil is then taken out, then the other tonsil, the eurette is used and the adenoids are taken off really faster than I can tell you about it. This Sluder operation is really the operation of the present day. Operations used to be done with a wire snare, and it was the operation for a good many years. In the Sluder operation the instrument is carried clean across the throat, the tonsil pressed forward, and the operation done that way. When I say in one-half to one minute it is true, and before the patient knows anything out comes the growth and that is the end of it.

Dr. T. L. W. Bailey, Clinton: Mr. Chairman, I am a general practitioner, and my observation has been instead of using a gargle after the tonsillectomy, to use a spray. I say that because I feel that we can get at the root of the disease without pain, and at the same time make the application of the atomizer or spray easier than the patient can use the gargle.

Dr. Mikell Closes Discussion: Mr. President, I want to thank the gentlemen for their full discussion of this paper, but it seems to me that my friend, Dr. Kibler, discussed the operation of tonsillotomy and not the operation of tonsillectomy. I am glad that he mentioned Dr. Justus Matthews, as I am giving his technique as somewhat modified by Dr. A. P. Voislawsky, of St. Luke's Hospital, New York City. This method was used in 12,000 cases at the Mayo Clinic up to 1917.

Some one asked about hemorrhage. I want to say the man who doesn't have hemorrhage after tonsillectomy, once in a while, does not do many tonsillectomies, but hemorrhage occurs very rarely after using this technique and usually occurs within the first twelve hours. When it does occur it is more in the nature of a general ooze, as there are no blood vessels of any size cut, being principally a matter of dry dissection.

It is surprising in this work, how many people are afraid of a general anesthetic, and there are a number of people to whom it is dangerous to give a general anesthetic. Three weeks ago a man was referred to me who had a blood-pressure of 225 plus, weighed about 200, plus; urine loaded with albumin,—a bad subject for general anesthetic. The doctor referred him to me and pus was found in his tonsils. Inside of three weeks after local tonsillectomy, the pressure has dropped

below 180, and his albumin is practically gone. He told me he would never have any other method if he had to go through it again.

In view of these facts I do not see how any fair-minded man could condemn the operation of local tonsillectomy if he has not done the operation according to the technique of the man who has perfected this operation.

Dr. Porcher mentioned the Sluder operation, and while this operation is used by large numbers of the best men in the profession, the one weakness is, it does not always remove lymphoid

tissue at the base of the tonsil. In children, local tonsillectomy is not applicable, and I use in the majority of my cases the Beck tonsillotome, which when used properly gives a beautiful result. Even with this instrument one has to be careful not to leave lymphoid tissue at base of the tongue,

One thing that appeals very strongly to the patient is the absence of pain during the operation. Out of the last forty-four cases done under local anesthesia, the only ones that complained of pain were a trained nurse and a physician,

BOOK REVIEW

A TREATISE ON CYSTOSCOPE AND URETHROSCOPY BY DR. GEORGES LUYS.

Former Interne, Hospitals of Paris; Former Assistant in the Department of Urinary Diseases at the Lariboisiere Hospital; Laureate of the Faculty of the Academy of Medicine.

TRANSLATED AND EDITED WITH ADDITIONS BY ABR. L. WORBARST, M. D., NEW YORK.

Cystoscopist, Beth Israel Hospital; Consulting Urologist, Central Islip and Manhattan State Hospital; Genito-Urinary Surgeon, West Side German Dispensary and Hospital; Author of "Gonorrhea in the Male," etc.

With 217 Figures in the Text and 24 Chromotypographic Plates Outside the Text, Including 76 Drawings from Original Water Colors.

ST. LOUIS, C. V. MOSBY COMPANY, 1918.

The translator and the well known Author of this book have placed the English speaking profession under lasting obligations by presenting this magnificent work before us. The illustrations are superb and the work in general of the publishers deserves more than simply favorable comment.

THE UNGEARED MIND BY ROBERT HOWLAND CHASE, A. M., M. D.

Physician-in-Chief Friends Hospital (for Mental Diseases); formerly Resident Physician, State Hospital, Norristown, Pa.; Member of the American Medico-Psychological Association. Member of the Philadelphia Neurological and Psychiatric

Societies; Author, General Paresis, Mental Medicine and Nursing, and History of Friends Hospital.

Illustrated.

PHILADELPHIA, F. A. DAVIS COMPANY, PUBLISHERS, ENGLISH DEPOT, STANLEY PHILLIPS, LONDON, 1918. PRICE \$2.75 NET.

We have never read a more fascinating book on the "Mind Diseased." The author did not intend this to be a text book but rather in lighter vein with gems of truth sparkling from cover to cover. He who reads mental and Nervous Diseases as by no means dry subjects and such patients to be turned over to the specialists as a rule.

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J. W. Ballantyne, M. D., Edinburgh.
 Rupert Blue, M. D., D. P. H., Washington, D. C.
 John G. Clark, M. D., Philadelphia.
 James J. Walsh, M. D., New York.
 Arthur F. Beifeld, M. D., Chicago.
 Charles Greene Cumston, M. D., Brussels and Geneva.

Volume two, Twenty-eighth Series, 1918.
 Philadelphia and London.

J. B. LIPPINCOTT COMPANY.

Among the excellent articles in this issue are the following.

CLINICS

A General Consideration of Pancreatitis.
 Focal Infection as a cause of Keratitis and Iritis.

The Interpretation of Urea or Non-Protein Nitrogen Estimations in the Blood in Various Kidney Lesions.

Clinic held at the Lying-In Hospital, November 13, 1917.

Clinic at the Presbyterian Hospital, Chicago.

Surgical Clinic of Dr. J. B. Blake, October 16, 1917, at the Boston City Hospital.

From The Skin Clinic of the Massachusetts General Hospital.

MEDICINE

On the Psychological Handling of the Tuberculous Patient.

The Early Diagnosis and Treatment of Syphilis of the Nervous System.

PUBLIC HEALTH

Babies and the Rising Cost of Milk.

OBSTETRICS AND GYNAECOLOGY

A Case of Enchondrosarcoma on the Right Side of the Pelvic Cavity in Pregnancy; with Remarks on Obstructed Labor From Neoplasms Arising in the Pelvic Bones.

Tuberculosis of the Vulva.

The Diagnosis, Incidence, and Association of Certain Lesions in the Pelvic Organs of Women.

OPHTHALMOLOGY

Primary Tuberculosis of the Conjunctiva.

SURGERY

Gastric and Duodenal Ulcer.

Fulminating Appendicitis Complicated by Pneumonia.

Fistula of the Rectum.

The Surgical Treatment of Exstrophy of the Bladder.

The Surgical Treatment of the Bladder.

HISTORY

A Syllabus of the History of Obstetrics and Gynaecology.

CLINICAL DIAGNOSIS

Fourth Edition, Revised and Reset CLINICAL DIAGNOSIS. A Manual of Laboratory Methods. By James Campbell Todd, M. D., Professor of Pathology, University of Colorado. Fourth edition, revised and reset. 12mo. of 687 pages with 232 text-illustrations and 12 colored plates. Philadelphia and London: W. B. Saunders Company, 1918. Cloth \$3.00 net.

This book is creditably written, the language is not too ultrascientific for the

busy practitioner though the student and the Laboratory worker will find it especially attractive. The illustrations are unusually good. We heartily commend the work to any student.

PRINCIPLES AND PRACTICE OF INFANT FEEDING BY JULIUS H. HESS, M. D.

Major M. R. C., U. S. Army, Active Service

Professor and Head of the Department of Pediatrics, University of Illinois College of Medicine; Chief of Pediatric Staff, Cook County Hospital; Attending Pediatrician to Cook County Michael Reese and Englewood Hospitals, Chicago.

ILLUSTRATED

Philadelphia

F. A. DAVIS COMPANY, Publishers

English Depot

Stanley Phillips, London

1918

Price \$2.00 net

The last word about Infant Feeding remains to be spoken but the tendency fortunately is along the lines of simplicity. Dr Hess has in this volume contributed much toward a clearer understanding of modern methods of Infant Feeding.

THE HOSPITAL AS A SOCIAL AGENT IN THE COMMUNITY.

The Hospital as a Social Agent in the Community. By Lucy C. Catlin, R. N., Director of Social Service Work and Executive Director of the Out-Patient Department of Youngstown Hospital, Ohio. 12mo of 113 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$1.25 net.

In these war times opportunities for social workers are multiplying with great frequency. A brief handbook is here presented and should prove useful to the seeker after broader knowledge.

1917 COLLECTED PAPERS OF THE MAYO CLINICS, ROCHESTER, MINN.

1917 COLLECTED PAPERS OF THE MAYO CLINIC, Rochester, Minn. Octavo of 866 pages, 331 illustrations. Philadelphia and London: W. B. Saunders Company, 1918. Cloth \$6.50 net.

No surgeon feels that he has in his library the last most authoritative papers until he secures the collection under review. The entire profession looks forward to their publication with keen interest.

QUALITATIVE CHEMICAL ANALYSIS.

(Second Edition)

A LABORATORY MANUAL OF QUALITATIVE CHEMICAL ANALYSIS. By A. R. Bliss, Jr., M. D., Ph. G., Professor of Pharmacology, School of Medicine, Emory University Atlanta, Ga.; Formerly

Professor of Chemistry and Pharmacology, Graduate School of Medicine, University of Alabama Second Edition, Revised and Reset. 194 pages, with working tables. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$2.25 net.

We are inclined to believe that the Laboratory worker will find this book a satisfactory guide.

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BY FRANK G. NIFONG, M. D.,
F. A. C. S.

With an introduction by
Harvey G. Mudd, M. D., F. A. C. S.
With 124 Illustrations
St Louis
C. V. MOSBY COMPANY
1918

The Surgeon or the general practitioners who have never been able to secure the results desired or even to make use of the Hodgen Splint will find here a most excellent resume of the whole subject.

DISEASES OF THE MALE URETHRA INCLUDING IMPOTENCE AND STERILITY BY IRVIN S. KOLL, B. S., M. D., F. A. C. S.

Professor of Genito-urinary Diseases, Post-Graduate Medical School and Hospital; Associate Genito-urinary Surgeon, Michael Reese Hospital, Chicago.

ILLUSTRATED

Philadelphia and London
W. B. SAUNDERS COMPANY
1918

Perhaps no branch of medicine has emerged so rapidly from the shades of Empiricism as has Urology. Such writings as the little volume under consideration lend much to the end that all foolish prudery and ignorance in regard to sex matters may speedily disappear. The persistent onslaught of science is bound to prevail.

DISEASES OF THE MALE URETHRA.

Diseases of the Male Urethra. By Irvin S. Koll, M. D., Professor of Genito-Urinary Diseases, Post-Graduate Medical School and Hospital, Chicago, Octavo of 151 pages, with 123 illustrations, several in colors. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$3.00 net.

DISEASES OF THE MALE URETHRA INCLUDING IMPORTANCE AND STERILITY BY IRVIN S. KOLL, M. D., F. A. C. S.

Professor of Genito-Urinary Diseases,

Post-Graduate Medical School and Hospital; Associate Genito-Urinary Surgeon, Michael Reece Hospital, Chicago.

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1918

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THE TREATMENT OF CAVERNOUS AND PLEXIFORM ANGIOMATA BY THE INFECTON OF BOILING WATER (WYETH METHOD) BY FRANCIS REDER, M. D., F. A. C. S.

Visiting Surgeon to city hospital; consulting surgeon to St. John's Hospital and Missouri Baptist Sanitarium, St Louis.

ILLUSTRATED
St. Louis
C. V. Mosby Company
1918

The author gives a clear description of one of best known and most effective surgical procedures. We question whether the operation has become as popular as it deserves.

LOCAL AND REGIONAL ANESTHESIA. Second Edition, Reset.

LOCAL AND REGIONAL ANESTHESIA, including Analgesia. By Carroll W. Allen, M. D., of Tulane University, New Orleans, with an introduction by Rudolph Matas, M. D., of Tulane University, New Orleans. Second Edition, Reset. Octavo of 674 pages with 260 illustrations. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$6.50 net.

Any one who presents a strong argument for more general use of Local Anesthetics in America has done well for it is a field far from complete cultivation. We welcome the second edition of this exhaustive treatise on Local and Regional Anesthesia.

THE SURGICAL CLINICS OF CHICAGO.

June, 1918
Volume 2, Number 3
With 63 Illustrations
Published bi-monthly
W. B. SAUNDERS COMPANY
Philadelphia and London

This month we have as usual a large number of most interesting clinics reported. Some of them are as follows:

CLINIC OF DR. ALBERT J. OCHS-

NER, AUGUSTANA HOSPITAL. Renal Calculus and Gall-Stones: Removal Through Right Lumbar Incision; Dietetic Treatment of Renal Calculi.

CLINIC OF DR. ARTHUR DEAN BEVAN, PRESBYTERIAN HOSPITAL. Kidney Stone, Ureteral Stone, Crolemia from Obstruction Due to Common Duct Stone, Large Ulcerating Sarcoma of the Neck, Huge Fibroma in the Mesentery at Lleocecal Junction, Jejunal Obstruction Due to Adhesion About Site of Gastro-Enterostomy.

CLINIC OF DR. GUSTAV KOLISCHER AND DR. J. S. EISENSTAEDT, MICHAEL REESE HOSPITAL. Ureteral Stone.

CLINIC OF DR. FRANK SMITHIES, AUGUSTANA HOSPITAL. Cases Illustrating Diseases of the Gall-Bladder and Consideration of 1,000 Cases of Gall-Bladder Disease.

CLINIC OF DR. CARL BECK, NORTH CHICAGO HOSPITAL. A New Method of Gastrostomy.

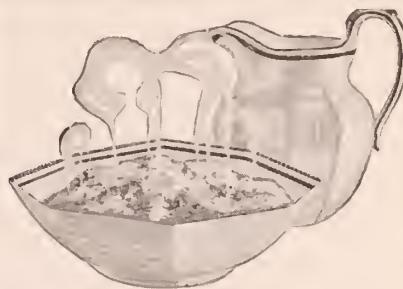
CLINIC OF DR. FREDERIC A. BESLEY, COOK COUNTY HOSPITAL. Surgical Affections of Stomach and Duodenum.

CLINIC OF DR. FREDERIC G. DYAS, COOK COUNTY HOSPITAL. Removal of Abdominal Tumors Under Local Anesthesia. Use of the Hoglund Bone Transplant for Ununited Fractures Tibia.

CLINIC OF DR. NELSON M. PERCY, AUGUSTANA HOSPITAL. Tumor of the Gosserian Ganglion.

CLINIC OF DR. DANIEL N. EISENDRATH, COOK COUNTY HOSPITAL. Injuries of the Chest in Civil Life and War.

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ABSTRACTS

DISTINGUISHED VISITORS TO AMERICA

Dr. Franklin Martin, Member of the Advisory Commission of the Council of National Defense and Chairman of the Council's General Medical Board, authorizes the following:

After a tour of many American cities, which enabled them to meet and address representative groups of American physicians and surgeons, Sir James Maekenzie, noted heart specialist, of Edinburgh and London; Colonel Sir William Arbuthnot Lane, veteran surgeon of the Zulu, Egyptian and Boer wars, and authority on bone surgery, and Colonel Herbert Alexander Bruce, of Toronto, now consulting surgeon to the British armies in France, comprising the medical mission sent by the British Government to this country have returned to Great Britain.

"In the travels of our mission through America, we have been to many centers of war activity here," said Colonel Bruce, "and we will have a great deal to say when we get home about the marvelous and effective program which you are carrying out on so colossal a scale. I want to say that it has heartened us very much, and that we know it will hearten the people at home when we report there."

The visitors first came to Washington to pay their respects to Surgeon General Gorgas. Thence they departed for Cincinnati to attend the annual meeting of the American Surgical Association. At a special patriotic session in the Hughes High School, Cincinnati, June 6, under the auspices of the Ohio State Committee, Medical

Section, Council of National Defense, Colonel Bruce described the British system of caring for the wounded. He stated that the British have forty hospital trains in France fully equipped with doctors and nurses, each train having a capacity of 600 beds—the whole constituting a mobile hospital of 24,000 bed capacity. He paid tribute to the heroism of the field hospital service and to the American surgeons and physicians in that service.

Sir Arbuthnot Lane told of the treatment of thousands of soldiers wounded in the face, some with jaws gone, others with cheeks or noses shot away. Colonel Lane is consulting surgeon at the Queen's Hospital at Sidcup, where this facial reconstruction or plastic surgery is the special work. "The man who loses an arm, a leg, or is injured in the body, can go back to the bosom of his family, but the man whose face is distorted, no matter how much his family may love and cherish him, suffers most," said Sir Arbuthnot. "So I began to isolate these cases, beginning with five doctors. This start has developed into a magnificent hospital with 750 men, and we are literally making new faces. We have enlisted the services of the best dentists, sculptors, wax workers, and surgeons, and developed specialists in transferring bones from other parts of the body to the face. If you could see how happy these men are, it would be a lasting satisfaction to know their gratitude."

Sir James Maekenzie told of some of the heart cases referred to him. "Instances of 'irritable heart,' he said, "are due to general weakening of the body through illness in the trenches."

Outdoor exercise and sports are curative agencies, he said.

Sir James, in speaking of the examination of recruits, said "The tests of a man's fitness as a soldier should depend upon what he has been doing and what he is able to do. A young fellow was sent to me because his heart was supposed to be bad. I asked him what he had been before he entered the service. He said he had been a butcher. I asked him if he had been able to carry the carcass of a sheep upstairs and whether such work had been a regular part of his duties. He said that he had been accustomed to doing exactly that, and frequently, and without physical discomfort. I said: 'I do not need to examine your heart. If you can do work like that you are certainly fit.' Too many men are rejected because of alleged defects which are more apparent than real."

It was after this meeting that Colonel Lane asked why women are not eligible to the Medical Reserve Corps. He said that he had been instrumental in having them admitted to the Medical Service in Great Britain.

The noted British surgeons were guests at the monthly meeting of the General Medical Board of the Council of National Defense and at the meeting of the State and County Committees of the Medical Section of the Council, held Sunday, June 9, in Chicago. At this time Colonel Bruce took special pains to speak of the work of American surgeons many of whom are members of the General Medical Board who are doing most important work at the front—Drs. Frederic A. Besley, George W. Crile, J. M. T. Finney, Charles H. Peck, William S. Thayer, Harvey Cushing, George E. Brewer, Richard H. H. Harte and others. "These men went over as medical men—and stayed as soldiers, for they operate at the front lines amid bursting

shells and dare continually under fire. While I was in France before leaving to come here on this mission, Sir Arthur Sloggett, of the British Medical Service, sent for me and said he wished me to take a message to America. This is what he said: 'I appreciate the very excellent work which American doctors and American nurses are doing in the British service.' He said they had been a very great help and an inspiration to the service. In fact, they will never forget the American doctors and nurses. He recommended a large number of your medical officers at the front for the same honors that he had recommended for those in his own service, but owing to the regulation of your Government they were not able to accept. On a recent trip to the front, I met also a number of your soldiers, who gave one the opinion when one looked in their faces that nothing would stop them, and you know what they did when they first encountered the Hun quite recently. I don't think you need to worry about the enemy getting a few feet of territory. One of the other side can get some ground if they pay a sufficient price for it, and during the offensive of the 21st of March, and subsequent dates, the Hun paid a very large price for the territory which he took. Even if we should be driven to the sea, and if we have to take to the boats and go to England, this battle is not over. 'We will make it so that ships sailing through the Irish sea sail a sea boiling with submarines,' said one of the German leaders in February, 1917. To which England replied: 'Make it boil like the caldrons of hell, and we will sail just the same.' We of Canada and you of the United States are of the same race and blood. Now that we are comrades in arms, we have a still further bond uniting us. I have difficulty in appreciating

the difference between Canada and America. I can tell you the difference between England and America. England says: 'As it was in the beginning, is now, and ever shall be. Amen.' America says: 'As it was in the beginning, is now, and by gosh there's got to be a change.' That spirit now represents the opinion of England as well as that of our allied nations.

"The German chancellor when America entered this war was very sneeringly remarked that the weight you would throw into the scale would not be greater than that of a straw. To this Mr. Punch replied that he quite agreed with the statement of the German chancellor, but he would like to point out and make the prediction that it would be the last straw which would break the camel's back."

Sir James Mackenzie praised highly the classification of American surgeons as reported by Dr. William J. Mayo for the Committee on Surgery of the General Medical Board. The class indexing and coding of the more than 20,000 American physicians was termed ideal by Sir James, who said that the United States is avoiding the mistakes made by England. "England," he said, "was precluded from such a systematic course by the suddenness with which the war came."

Colonel Lane told of the enormous help given by American surgeons who came over long before America's entry into the war, saying that he had been asked to speak about the difficulty of getting medical men for the military service. He said: "The difficulty with us has been to keep them out. I do not suppose you are any different from our men. I have always understood that the medical people in America were the keenest people in the world. Our people have gone without a word. They gave up their practices, their futures, their

wives and their children. They did not ask: 'How much are we going to be paid?' or 'What is going to become of our families?' they came at once to the aid of their country. I do not think you will have to ask the medical men to come. I think the difficulty, my friends, will be keeping them away."

After their attendance upon the sessions of the American Medical Association Convention, the visitors made a trip to Rochester, Minnesota, as guests of the Mayo brothers. In Boston, on June 19, the visitors spoke at sessions of the Massachusetts Medical Society in the Boston Medical Library. After this, came visits to Detroit, Cleveland, Pittsburgh, Philadelphia, and New York City, accomplished by Dr. Franklin Martin, Member of the Advisory Commission of the Council of National Defense and Chairman of the General Medical Board, and Major Henry D. Jump of the General Medical Board, arrangements being made in advance for them to speak at meetings held under the joint auspices of the State Committees, Medical Section, Council of National Defense and the local medical societies. Upon all these occasions the visitors urged the need of physicians at the front, and warmly seconded the efforts of the State Committees, and of Dr. Martin and Major Jump, in appealing to the doctors to enroll in the Medical Reserve Corps, Naval Reserve Force and Volunteer Medical Service Corps.

In Detroit on June 21, the visitors were shown about the city and visited the Packard and Ford plants. In the evening at a big meeting in the new Elks Temple Auditorium, Colonel Bruce spoke of the work of Detroit surgeons at the front, including Drs. Angus McLean, Burt R. Shurly, Theodore A. McGraw, Harry N. Torrey, William A. Spitzley, Frank B.

Walker, Louis J. Hirschman, Ernest K. Cullen, and also Dr. John R. Sherrick, a Michigan physician who has been awarded the military cross for gallantry.

Colonel Bruee frankly criticised Americans for eating too freely, saying that the menu cards in hotels and restaurants astonished foreigners. He urged that white flour and meat be conserved to a greater extent, and that the use of motor cars for pleasure be cut down.

Colonel Lane urged that instead of being lulled into security by the apparent success of war-winning work, America should forge ahead to greater efforts.

From Detroit the party went to Cleveland by boat. After a dinner at the Union Club, there was a largely attended meeting at the Chamber of Commerce, over which Dr. C. A. Hamann presided. In addition to the talks by the visitors, Dr. William E. Lower, of Cleveland, who recently returned after a year's service with the Lakeside Unit at the front, also spoke.

Thence to Pittsburgh, where Dr. J. J. Buchanan, Chairman of the State Committee, Medical Section, Council of National Defense, and his coadjutors, had made such preparations for the meeting that two thousand persons thronged Carnegie Music Hall for the meeting Sunday night, June 23.

"When I left England I felt certain that we should win the war sometime," said Colonel Lane. "Since I have been in this country I have become more certain, and I have come to believe that we shall win it soon." Colonel Lane spoke with enthusiasm of the shipbuilding activities he had seen on this side. He regarded as equally efficient the medical organization work in Washington under Surgeon General Gorgas and Dr. Franklin Martin. "You can make a soldier in four

months for the sea, earth, or air," he said, "but it takes seven years to make a doctor, and after we get him he must learn his job. It makes a vast difference in the work of a hospital whether or not it is organized for efficiency, and this depends largely upon the fitness of the physicians for their particular work."

Colonel Bruee said that the work of the medical men in the armies had stamped out typhus and typhoid fever, there being when he left France only twenty-seven cases of typhoid fever in an army of two million men. He told of an experience he had had in a hospital bombed by the Germans, adding that sixteen wounded German prisoners had been killed by one of the bombs dropped.

In Philadelphia, the visitors were the guests not only of the physicians, but of the city as well. Forty prominent men, including city officials and leaders in various activities, attended the dinner in their honor at the Bellevue-Stratford Monday night, June 24. During the day the visitors had been taken to Cramp's Shipyards the plant of the International Shipbuilding Corporation at Hog Island and the Eddystone plant of the Remington Arms Company. The meeting at 9 o'clock in the Bellevue-Stratford ballroom was presided over by Dr. Edward Martin, of Philadelphia. Colonel Lane said: "When America sent Dr. Alexis Carrel to Europe, she did more than if she had sent ammunition, guns and food. His discovery has worked miracles among the wounded of the Allies." Colonel Lane also praised highly the other doctors and nurses from the United States.

Sir James Mackenzie asserted that England is not in danger of starvation. "Nor are there any signs of famine at present," he said. "Up to the last harvest, food was scarce, and we had

a hard time to get the staples of life, especially cheese and potatoes. Now things are running smoothly." Sir James urged that efforts be made to counteract German propaganda in Russia.

Colonel Bruce asserted that the imaginary boundary line between Canada and the United States had been wiped out, and that the present war has cemented the relations between the countries. Speaking of England's independence of Germany, he said: "We make our own dyes, and we do not bother or even give a thought about the supply of German potash. Five thousand ships enter and leave British ports each week. We have loaned 600 ships to France and 400 to Italy. Before the war less than 200,000 women were engaged in work; now the number exceeds one million, in more than 400 branches of munitions manufacture. Social distinctions have been leveled in the utter democracy of overalls and caps."

On the eve of their departure, the distinguished visitors were entertained at a dinner given them by the New York doctors at the Metropolitan Club.

July 12, 1918.



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South Carolina Medical Association



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EYE, EAR, NOSE, AND THROAT.

E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

VOLUNTEER MEDICAL SERVICE CORPS

The Council of National Defense authorizes the following:

Many thousands of blanks for enrollment of the legally qualified men and women physicians of the country in the reorganized Volunteer Medical Service Corps are being mailed by the Chairman of the General Medical Board of the Council of National Defense. With the blank are enclosed a letter and a folder giving all details as to the organization.

The blank which applicants are asked to fill out reads:

APPLICATION FOR MEMBERSHIP IN THE VOLUNTEER MEDICAL SERVICE CORPS AUTHORIZED BY COUNCIL OF NATIONAL

DEFENSE

APPROVED BY THE PRESIDENT OF THE UNITED STATES

(Spaces for date, full name, street, city and state addresses.)

1. Date of birth.
2. Place of birth.
3. If foreign born, when did you become a resident of the United States?
4. When and where naturalized? How?
5. Are you single, married, widow-ed, or divorced? Nationality? Color? Height? Weight?
6. State high school, academy, college, or university you have attended, with dates of attendance, graduation, and degrees received.
7. Give all literary or scientific degrees you have received and names of institutions granting them, with dates.

8. With what languages or branches of science are you familiar?

9. When and where graduated in medicine?

10. When and where licensed to practice medicine?

11. Name principal medical societies of which you are a member. (Do not abbreviate.)

12. What specialty of medicine do you practice?

13. Proportion of time devoted to specialty?

14. Clinical experience in specialty? Institution? No. of years?

15. State all past hospital services. Hospital. Capacity. Date.

16. Present hospital connections. Hospital. Department. Capacity.

17. School and teaching positions occupied in the past. School. Capacity. Date.

18. School and teaching positions now occupied. School. Department. Capacity.

19. State all past experience in industrial or railroad medicine and surgery. NAME AND ADDRESS OF PLANT. TYPE OF SERVICE (whether medical, surgical, occupational diseases, accident work, contract practice for families of workmen, etc.) DURATION OF SERVICE.

20. State all present connections with industries or railroads. NAME AND ADDRESS OF PLANT. TYPE OF SERVICE (whether medical, surgical, occupational diseases, accident work, contract practice for families of workmen, etc.) TIME DEVOTED TO EACH PLANT.

21. State military, naval or public health experience you have had.

22. Are you a Federal, State, County, or Municipal officer? (State exact designation of your office.)

23. Are you engaged in enterprises other than medicine? If so, what?

24. Have you followed any occupation, medical or otherwise, not already noted?

25. Have you previously been an applicant for entry into the United States Service? Service. When, Where. Result. (If rejected, state why.)

26. I have not applied for appointment in the Medical Reserve Corps of the Army, the Naval Reserve Force, or the Public Health Service owing to—(Check reason).

a. Physical disability. (State disability in detail.)

b. Over age (55). (State age in Years.)

c. Essential institutional need. Name of institution. Position. Name and address of chief executive.

d. Essential community need. Approximate population. Number of physicians now practicing in your community.

e. Essential to Health Department. Name of department. Position. Name and address of chief of department.

f. Essential to industries. Name of plant. Position. Name and address of chief executive.

g. Essential to medical school. Name of medical school. Position. Name and address of dean.

h. Essential to Local or Medical Advisory Boards. Name and address of Board. Position.

i. Dependents. Number of dependents, including self but not employees. What proportion of your income or that of your dependents is derived from sources other than the practice of your profession? Do other persons contribute to the support of your dependents other immediate relatives who could provide support for your dependents?

j. Sex. (State your sex.)

k. Religious conviction, not a citi-

zen, or other reasons. (State reason.)

27. Are you available for any of the following services:

a. Consultant. Medical Service. Surgical Service, Public Health Service. Special Service—What?

b. Institutional. Laboratory. Administrative. Medical Service. Surgical Service. Speeial Service—What?

c. Medical Service for industries. Part time. Full time. Own community. Other communities. Kind of work.

d. Local or Medical Advisory Boards.

e. Reclamation of registrants rejected for physeal unfitness.

f. Services to needy families and dependents of enlisted men.

g. Sanitation.

h. Miscellaneous service.

28. Check the Governmental service in which you would prefer to serve, if selected.

a. Medical Reserve Corps of the Army.

b. Naval Reserve Force.

c. Public Health Service.

NOTE.—Wherever practicable, your preference will be given consideration. However, the exigencies of war may render it necessary to ask you to do service other than that indicated as your choice.

29. Personal references. (Name three, at least one physician.)

I hereby make application for membership in the Volnnteer Medical Service Corps of the United States. I certify that, to the best of my knowledge and belief, the answers to the preceding questions are true and correct in every respect. I pledge myself to abide by the rules and regulations of the Corps; to apply for a commission in the Medical Reserve Corps of the Army, the Naval Reserve Force, or for appointment in the Public Health Ser-

vice when called upon to do so by the Central Governing Board; and to comply with any request for service made by the Central Governing Board.

(Signature).....

(Present post-office address).....

..... An outline of the purpose and scope of the Volunteer Medical Service Corps, contained in the folder, is as follows:

Volunteer Medical Service Corps Organization

1. Provides means for obtaining quickly men and women for any service required.

2. Furnishes recommendations and necessary credentials to assure the best of medical service both military and civil.

3. Determines beyond question the attitude of the individual toward the war.

OBJECT OF CORPS

1. Placing on record all medical men and women in the United States.

2. Aiding Army, Navy, and Public Health Service in supplying war medical needs.

3. Providing the best civilian medical service possible.

4. Giving recognition to all who record themselves in Army, Navy, Public Health activities, or civilian service.

WORKING PLANS

All matters pertaining to the organization will be under the direetion of a Central Governing Board, authorized by the Council of National Defense and approved by the President of the United States, and its affairs will be conducted from the general headquarters of the Volunteer Medical Service Corps at Washington, D. C., under the Council of National Defense.

OPERATING SYSTEM

1. Central Governing Board of 25.
2. Forty-nine State executive committees.
3. One representative in each county in every State.

(Note).—(a) All men to be appointed to State and county committees preferably over fifty-five.

(b) Each State executive committee to consist of five in the smaller states and one additional member in each of the larger states in proportion to each 1,000 medical inhabitants (to be nominated by State committees, Medical Section, Council of National Defense, from among their own members.)

(c) Each county of 50,000 population or under should have one representative. All counties having over 50,000 population should have one additional county representative for each 50,000 population or fraction thereof. All county representatives to be nominated by the State executive committee.

DUTIES

Central Governing Board.—To receive and pass upon all appointments.

State Governing Boards.—To receive facts from county representatives and make recommendations to Central Governing Board.

County Representatives.—To submit facts to State Committees according to advice from Central Governing Board or State Executive Committees.

Under the reorganization, every legally qualified physician, man or woman, holding the degree of Doctor of Medicine from a legally chartered medical school, who is now attached to the Government Service, and without reference to age or physical disability, may apply for membership and be admitted if qualified; whereas, the origin-

al organization admitted only those who for various reasons were ineligible to membership in the Medical Reserve Corps. The organization will mobilize the medical profession in order to provide for the health needs of the military forces and the civil population, and the recording and classifying of doctors will afford means of obtaining quickly men and women for any service required.

To date about 40,000 of the 144,116 doctors in the United States—not including the more than 5,000 women doctors—either are in government service or have volunteered their services. Up to July 12 the Surgeon General had recommended to the Adjutant General 26,733 doctors for commissions in the Medical Reserve Corps. About 9,000 others who applied were rejected. With the 1,194 in the Medical Corps of the National Guard and 1,600 in the Navy, the total—38,527—constitutes 26.73 per cent of the civilian doctors. Deducting those who declined their commissions or who have been discharged because of subsequent physical disability or other cause, the number actually commissioned in the Medical Reserve Corps stands (August 23) at 23,531 with several hundred recommended whose commissions are pending. Of the 23,531 there are 22,232 now on active duty.

The need of using wisely the service of the medical men, in view of the universal war activities, is indicated when it is known that in the five weeks ended August 2, there were 2,700 medical officers commissioned in the Army, Navy, and Public Health Service—or at the rate of 540 per week. This rate at which enrollment is proceeding is the cumulative result of the operation of all the machinery which has been in process of setting up since the United States entered the world war. While

the number commissioned in the five weeks mentioned may seem large, it is not much greater than the rate at which medical men have been receiving their commissions during the past year. There are now 28,674 medical officers commissioned in the three services—26,027 in the Army, 2,427 in the Navy, and 220 with the commission of Assistant Surgeon in the United States Public Health Service. Of the 2,700 commissioned in the five weeks ended Augst 2, there were 2,527 in the Army, 169 in the Navy, and four in the United States Public Health Service. Also, forty doetors designated as Acting Assistant Surgeons have been taken on in the Public Health Service in the last two months, twenty-one for work in extra-cantionment zones, fourteen for special venereal disease work, and five for marine hospitals. The 26,027 in the Army Medical Service comprise 933 in the Medical Corps, the regular Army Service; 23,531 in the Medical Reserve Corps; 1,194 in the Medical Corps of the National Guard, and 369 in the Medical Corps of the National Army.

It is estimated that at least 50,000 doctors will be necessary eventually for the Army. It can readily be seen that with the enrollment of these active men, their places in communities and institutions must be cared for and the work, therefore, throughout the country must be so systematized and co-ordinated that the civilian population may not suffer. An important

aspect is the need for medical men in the communities where munitions and other vital war products are being made.

The Volunteer Medical Service Corps, supervised by the Central Governing Board now named, will thoroughly care for these needs.

In connection with the mailing of membership blanks for the Volunteer Medical Service Corps to all legally qualified men and women doctors of the country, Dr. Franklin Martin, Chairman of the General Medical Board of the Council of National Defense, says:

“Great as has been the response to the appeal for doetors, it must be greater. It is imperative that every doctor not already in a government service fill out, sign and return the blank to the offices of the Central Governing Board, Council of National Defense, Washington, at once. We believe thousands will do this, as they are anxious to be enrolled as volunteers for the Medical Departments of the Army and Navy before registration under the new draft law goes into effect. The appeal for enrollment in the Volunteer Medical Service Corps, which President Wilson has formally approved, is an official governmental call to service. This will place the members of the medical profession of the United States on record as volunteers, available for classification and ready for service when the call comes.”

ORIGINAL ARTICLES

SOME ASPECTS OF PROSTATIC SURGERY, WITH SPECIAL REFERENCE TO METHODS OF POPULAR CHOICE—PRE AND POST OPERATIVE TREATMENT

E. P. Merritt, M. D., Atlanta, Ga.

REMOVING the prostate gland is considered by most surgeons a most serious operation. The reason for this is the age of the patients, and their general weakened and fatigued condition when they decide that something must be done. In taking the history of candidates for prostatectomy. The onset or frequent urination began at least one or two years previous. Usually the history will date back further. In that length of time the individual has lost enough sleep to make even a young person lose weight and suffer from general nervousness, saying nothing about the harmful pathological changes that have taken place other than in the bladder proper.

It is interesting to review the literature on surgery of the prostate, the mortality tables from different sources, the different methods used for operation, etc., and the end results of prostatectomized patients.

Martin gives a very interesting description of 110 patients operated upon, fifty-five perineally and fifty-five suprapubically, each with the end results, and after careful consideration of each he is in great favor of the suprapubic route. As the complications

from the perineal were much greater his statistics were collected from the country at large.

The suprapubic operation is the one of choice by the majority of surgeons and in past history it has been the choice, although the perineal operation must not be condemned, as there has been some brilliant results attained by it.

One reason the results have not been so satisfactory possibly, is, there are more avenues for post operative complications by the perineal way to the less trained surgeon. The average surgeon can do a prostatectomy safer by the suprapubic route. Therefore, he should do it that way.

Considering all phases of the end results, etc., I agree with Martin when he says "it is well that the perineal operation is losing popularity. Showing by measuring the end results the suprapubic method is vastly superior to the perineal operation."

It is interesting to note a primary mortality according to H. Simons' suprapubic method.

Both Methods:

Walker—112 cases.....5.0 per cent
Freyer—1,000 cases (1st
100 cases 10%, last
100 cases 3%).....5.5 per cent

Perineal method:

Young—450 cases3.7 per cent
Watson6.2 per cent
Proust5.8 per cent
Legneau, (1,026 collected
eases)8.0 per cent

Judd.....5.3 per cent
an operation is indicated, other things are also indicated preliminary to the removal of gland.

Here I wish to speak of the pre-operative treatment, under this heading, the two stage operation is advisable in majority of cases and is fast gaining popularity, on account of end results, and good condition of patients while convalescing.

First of all there are some things essential to know before starting, namely, the kidney functioning power, especially the length of time certain drugs are excreted after being injected into the body. For instance, an intravenous injection of indigo carmine or phthlie should appear in from three to six minutes, if same did not appear for thirty minutes I would hardly need go farther to find out that the kidneys were very inactive and the promising as to the prognosis should operation be done.

The two step operation offers great hope to the sufferer to whom it would almost mean sure death to do the complete operation at one time, especially is this true where the kidneys are not equal to do their duties.

Personally I differ with III Judd when he says he does not believe it necessary or advisable to do the two step operation. His catheter method has been tried by me and found wanting.

A very thorough examination should be made of every case for prostatectomy before proceeding, and especially should the type of enlargement be ascertained if possible. This cannot be done every time but in the majority of cases, especially where cystoscopic examination can be made will greatly aid in making diagnoses, especially of malignancy.

The rule is, among most informed men in this line, "if possible" leave them alone.

The pre operative treatment should consist of increasing the urea and other

solids of the urine. This is accomplished by proper diet. Water in quantities, rest, stimulation of the secretory glands, especially the bowels and alkaline medication. The first stage of the operation comes under this head also. It consists of a simple suprapubic cystotomy and allowed to remain open causing free drainage relieving back pressure on the kidneys and clearing up distressing bladder symptoms, and in my opinion an auto-geneous vaccination is accomplished by the gradual absorption of bladder contents into the raw surfaces of the wound. The time that it usually takes between the two operations in majority of cases is ten to fifteen days, then another examination is made and if indications are promising the gland is removed through the same incision previously made.

The first stage can be done in selected cases under novo cain 1/2%, saving the patient shock from general anaesthesia. The choice of anaesthesia for me has been nitrous oxide, causing practically no shock or endangering the lungs for onset pneumonias.

The important post operative conditions more often met with that have to be treated more or less systematically are, Uremia, with its symptoms. Heart conditions. Hemorrhage, shock, etc.

Uremia in a great percentage of cases can be avoided by the proper pre operative treatment as mentioned.

I have found small doses of calomel along with diuritin to increase solids of urine and plenty of water very satisfactory to avoid uremic attacks. Avoid the use of morphine as much as practical to do so.

Hemorrhage: There are many ways devised for stopping hemorrhage. Different forms of packing and appliances, many of which are valuable.

Some are useless and do no good, rather harm. Coagulen and horse serum have stopped some severe hemorrhages for me and have never failed. They do no harm as far as I can tell.

Shock is treated as I stated systematically; or about as shock produced by operations elsewhere. Glucose enemas to be retained with sod. bicard. is very good for rectal procedure. Fisehers solution also Sol. Bicarb, soda intravenously, stimulants, strychnine, brandy, etc.

Conclusions: As has been stated by all that have ever written on prostatic surgery, the risks are all bad, but to look at the mortality table it is amazingly low, considering all phases of the question. Prostatic enlargement or obstructive type cannot be diagnosed every time per rectum. It is necessary for cystoure-thrascopic examination to have an accurate idea of just the amount of trouble present. Sometimes by rectal examination the enlargement is very small and misleading. On the other hand a cystoscopic view would disclose a large gland.

All surgeons are working for the smallest mortality, count plus the end results. Therefore, after personal operative experiences and careful analysis of the subject I am inclined to believe at present the two stage operation offers the greatest inducement for the old men of little resisting power.

Martin Clarencee. End results in the prostatectomized patient: A comparative analysis, based on one hundred and ten cases (fifty-five suprapubic, fifty-five perineal. Jan. A. M. H., May 4, 18. II Simons Irving, Factors Determining mortality in prostatectomy Interstate Medical Journal, June, 1918. III Judd E. S. Surgical treatment of Prostate. Pennsylvania Medical Jour-

look at the mortality table it is amazing, Nov., 1917.

MY EXPERIENCE WITH THE USE OF MERCURY INTRAVENOUSLY

By William R. Barron, M. D., Columbia, S. C.

SYPHILIS is one of the most potent causes of suffering and unhappiness.

It can be styled as one of life's greatest tragedies.

When the conscientious practitioner lets his mind travel from the so often diagnosed innocent sore, chancre, to Tabes and Paresis he views this demon monster, syphilis, with a feeling akin to fear.

Lieut. Col. Nichols of the U. S. Army, has demonstrated four types of Spirochetae Pallidae.

At present we have no practical method to demonstrate which type of Spirochetae Pallidae we are going to deal with in our patients.

The means of demonstrating by a practical laboratory test of what type of infection we are to treat, will, I trust, be an early addition to our present Diagnostic means.

I have for the past few years observed from clinical manifestations and therapeutic responses, that we certainly have more than one variety of Spirochetae Pallida.

I have found some types of Spirochetae Pallida that were easily and thoroughly cured with Salvarsan alone.

Realizing the extreme difficulty to often effect a cure of Syphilis I have always eagerly sought any and all means to obtain the same. After repeated courses of Salvarsan, Mercury Intra-

muscularly, by inunctions and by mouth and Iodide of Potassium, I have failed in a small per cent of cases to get Wasserman's to become negative and stay negative.

The Intravenous use of Merenry is rational Antisyphilitic Therapy. The method I am using is as follows: Commenceing with grains one twenty-fifth of Bi Chloride of Merenry in thirty to fifty C. C. of freshly distilled boiled water, this dose is gradually increased until grains one-fifth is reached. The interval of doses is from five to seven days. It is always best to follow this solution with twenty to thirty C. C. of distilled boiled water so that any Merenry may be washed out of the vein.

So far I have not given higher than one-fifth grains but believe some types of cases can take as high as one-half grain.

The guides to tolerance are those of Mercurialization. Some get severe abdominal pains, griping and Diarrhea from one-tenth of a grain given in this way.

The Bi Chloride does sclerose the veins and unless the patient has large veins and plenty of veins this mode of Therapy must be limited.

If it were possible to always wash out the veins with plain distilled water the damage to veins would be far less.

I have only two cases of persistent Wasserman that have failed to become negative on Intravenous Merenry, and neither of these could permit of a sufficient number of doses Intravenously.

Repeated examinations of the urines in these cases have failed to show any evidences of kidney irritation or damage from this mode of Therapy.

DISCUSSION

Dr. W. P. Porcher, Charleston: This is an immense subject and as it

would take all of the afternoon to discuss it I will just touch upon a few points.

I have seen cases where mercury would not cure syphilis. There are certain cases where certain treatments are serviceable and others are not. I want to quote only one case. It has been my good fortune to keep at least three cases out of the lunatic asylum by proper treatment.

One had been salivated for a gumma of the brain and I gave him 600 grains iodine of potash a day. He got perfectly well and went home.

We see so much syphilis in the throat and nose that we almost come to the conclusion that there is no syphilis anywhere else.

One other thing I want to say and lay stress upon—the adding of opium to the mercury if you want to salivate them. There are cases where it is necessary to salivate them in order to get the results, but there are other cases where the iodine has to be pushed. I have given as much as 900 grains a day and the patient has not only gotten well but has shown no signs of iodism.

SOME REMARKS ON GALL BLADDER AND DUCT SURGERY

By R. L. Sanders, M. D., Memphis, Tenn.

R. S. Fowler in a recent article made the statement that cholecystectomy is indicated in all diseases of the gall bladder whether producing mild or severe symptoms. This opinion is being conurred in by an increasingly large number of surgeons who have acquired technical skill in the removal of this organ. On the other hand, some surgeons have abandoned the operation

Read before the South Carolina Medical Association, Aiken, S. C., April 18, 1918.

and are practicing cholecystectomy following unfortunate accidental injury to the duets, with resulting stricture and obstructive jaundice or a biliary fistula. Judd, Bevan and others have pointed out that a proper incision and exposure of the duets has materially lessened these accidents. The day is rapidly passing when operations are done upon the gall bladder for the sole purpose of removing stones. Rosenow's illuminating work upon the hematogenous origin of cholecystitis, the demonstration of the presence of bacteria in the walls of the gall bladder in many cases where stones are not present, has materially changed the surgical management of gall bladder diseases. The late Dr. Murphy once said that gall stones are monuments erected to the memory of dead bacteria. If the infection producing the stones enters the wall of the gall bladder through the blood, as we now believe it does, it is not surprising to see a recurrence of stones or the continuation of symptoms following a drainage operation.

Chronic Cholecystitis without stones (strawberry gall bladder) is being recognized more and more as a definite clinical entity. Patients will give a history of characteristic attacks of biliary colic, the secondary manifestations, and yet at operation no stones will be found. It is not uncommon to find single or multiple papillomata associated with chronic cholecystitis. These as a rule are too small to be palpated before the gall bladder is removed. They occasionally will undergo carcinomatous degeneration, making expedient the removal of such gall bladders. Hydrops or cystic gall bladder is usually caused by a stone obstructing the cystic duet or an inflammatory stricture, the organ ceases to functionate, empyema is not infre-

quently the result, making it imperative that all such gall bladders be removed. Primary carcinoma of the gall bladder is not very common. Practically all surgeons have made the observation that cancer is a sequel of stones, and is probably the result of chronic irritation. If discovered while still limited to the gall bladder, cholecystectomy should be done.

The effect of the removal of the gall bladder is a compensatory dilatation of the duets. This dilatation does not involve the intrahepatic duets. After a few months the total capacity of the extrahepatic duets is about the same as that of the duets plus the gall bladder before its removal. Judd and Mann believe that pancreatitis is benefitted by cholecystectomy. Before the removal of the gall bladder the intraduct tension is approximately 150 mm. Following cholecystectomy this pressure immediately arises until the sphincter at the ampulla of Vater is paralyzed and then the pressure is reduced to about 50 mm. This allows the pancreatic duet free drainage, insures against bile under high pressure being forced into the pancreatic substance and thus a secondary pancreatitis is cured. The pancreatic duets do not dilate.

The presence of stones in the bile ducts is a more serious matter than stones in the gall bladder. Gall stones when quiescent do not cause much pain or disturbance, except the secondary digestive manifestations. Stones in motion produce the attacks of pain. Common duet stones may form within the liver duets and pass down into the common, but they usually have their origin in the gall bladder, pass through the cystic and lodge in the common duct. In their usual order of occurrence gall bladder attacks are characterized by pain, nausea and vomiting,

local sensitiveness and elevation of temperature (if infection is present). Jaundice is a late manifestation of gall bladder disease. It occurs when the stone or stones have passed into the common duct and obstruct the outflow of bile, causing it to dam into the biliary passages and from there it is taken into the blood stream. Jaundice occurs in about 20% of all cases of cholelithiasis and in only 33-1/3% when stones are in the common duct. When severe in degree and long continued it is usually due to stones impacted in the duct. Jaundice due to this type of obstruction usually clears up as soon as the edema and swelling subside, the duct dilates and the bile current passes around the obstructing stone. Chills and fever are quite common. This syndrome was originally classed as malignant malarial jaundice. The gall bladder is sparsely supplied with lymphatics and hence absorption is limited. We do not see chills, fever, sweats, etc., when the stones and infection are limited to the gall bladder. The cystic and common ducts are richly supplied with lymphatics, allowing absorption to take place, and hence the chills, fever, sweats, etc., are quite common when the obstruction and infections are located here. Stones bruise the mucosa and produce abrasions and ulcerations which allows infected material to get into circulation. This syndrome has been associated with common duct stones for many years and when the history is typical, one can be reasonably certain of the diagnosis before operating. In this type of obstruction, **pain** always **precedes** the jaundice, chills and fever.

The surgical treatment of stones obstructing the common duct is the removal of the stones by choledochotomy. The duct should be incised longitudinally and the stones removed with a gall

stones scoop. It is not a safe practice to endeavor to "milk" the stones back into the gall bladder. When the stones are impacted this is impossible. The scoop should be passed up into the hepatic and then down the common duct into the duodenum. Make sure that no stones are left in the ampulla of Vater. A catheter should be introduced through the incision in the common duct and passed up into the hepatic duct to divert the bile current to the surface, giving free drainage for eight to ten days. When the tube is removed, the opening in the duct promptly closes and the bile current again passes through the common duct unobstructed. W. E. B. Davis, Robson, Kehr and others several years ago called attention to the fact that the mortality was markedly reduced (from 40% to 10%) when this treatment was practiced instead of closing the duct. There is practically no tendency for strictures to form when the duct is incised in its longer axis, whereas a transverse incision would almost certainly result in a narrowing of its lumen.

As far as I can gather from the literature and my own observation, there are two causes for benign strictures of bile ducts. First, a cicatricial contraction resulting from ulceration and slough due to stones; second, accidental injury and segmental excision of the duct during the removal of the gall bladder. There are several ways in which the ducts may be injured. The gall bladder pelvis overhangs the cystic and often lies in contact with the common duct. Failure to make traction on this part of the gall bladder, straightening it out, and complete exposures of the cystic duct before clamping it, often results in injury to the common duct. In not a few cases segmental excision of the common duct

has resulted in this way. Most injuries of this type can be successfully repaired if recognized immediately, but if unrecognized will result in stricture and obstructive jaundice or a complete biliary fistula. On the other hand, if too much traction is made, one may angulate the ducts in such a way as to incorporate the hepatic with the cystic duct in the clamps. Probably one of the most common causes of injury to the duct is that of controlling hemorrhage. The cystic artery is equal in size to the inferior thyroid and produces sharp hemorrhage when cut. If it should slip and retract into Calot's angle, one is very likely to tear or clamp the hepatic duct grabbing for it in a pool of blood with heavy rat tooth forceps.

In the event the ducts are injured and a benign stricture forms, obstructive jaundice or a complete biliary fistula will almost certainly result. There are three ways in which we can overcome the obstruction surgically:

1. By a plastic reconstruction of the duct.
2. By excision of the stricture and end to end anastomosis of the duct.
3. Anastomosis of the duct to some portion of the intestinal tract.

The functional results are not always good and there is a liability of a reformation of the stricture. Such patients are usually bad surgical risks. In the hands of the most expert surgeons, the mortality in operations to reconstruct the common duct on account of benign strictures ranges from 12% to 15%.

Cancer of the common duct is a rare condition. It is much less frequent than cancer of the gall bladder. It is usually conceded that stones in the gall bladder act as the mechanical irritant which produces the cancer. It is a unanimous observation among

surgeons that stones are present in practically all cases of malignancy of the gall bladder. The reverse is true in cancer of the common duct. However, Robson believes that stones were present and passed out before the cancer formed. The site of cancer is usually in the duodenal end and the growth is usually a small, hard, localized tumor, plugging the duct and producing complete obstruction. Jaundice is the first symptom and is **painless**. It is unaccompanied by chills, fever or sweats except in those cases where infection is present. In the early stages the jaundice may be slightly intermittent but it is usually continuous and associated with emaciation till death supervenes. It is rare that such patients live more than one year. Cases have been operated upon, tumor excised and the duct reconstructed, but the results are far from satisfactory. Moynihan reports several. It is usually best to do some palliative operation to overcome the obstruction.

If the malignant process is in the head of the pancreas, it also obstructs the common duct. This condition is seen in patients past middle life. The onset is usually that of painless jaundice which gradually deepens with increasing weakness and emaciation until death ensues. The jaundice is of a green or often a greenish black tinge. One can frequently feel a mass in the right hypochondrium which proves to be a distended gall bladder. This association of chronic jaundice with a distended gall bladder is almost pathognomonic of a cancer at the head of the pancreas. This was first pointed out by Courvoisier and it became known as his law. "In case of chronic jaundice due to obstruction of the common duct, a contraction of the gall bladder signifies that the obstruction is due to stones; dilatation of the gall

bladder, that the obstruction is due to causes other than the stones."

Probably the most satisfactory palliative operation one can do is that of anastomosing the fundus of the distended gall bladder on to some part of the intestinal tract. This relieves the obstruction by allowing the bile to empty

direct from the gall bladder fundus into the intestinal canal. Some surgeons prefer to make the anastomosis between the gall bladder and the stomach; others the duodenum, the jejunum or the colon, respectively. Equally good results have been obtained in all these types of anastomosis.

ABSTRACTS

The following are abstracts from editorials published in The Journal of the American Medical Association for August 31, 1918:

A MEDICAL DIVISION IN THE PROVOST MARSHAL-GENERAL'S OFFICE

One of the important functions connected with the application of the selective service law in raising our Army is the physical examination of registrants. This work may be regarded a fundamental. If it is not satisfactorily done, some men who are physically fit will be rejected for physical causes and others who are not physically fit will be accepted. In the first case the nation loses in its fighting man power; in the second, the nation suffers a great financial loss in connection with inducting registrants who are returned to their homes, and later on through the payment of compensation for disability. The recent establishment of a medical division in the Provost Marshal-General's Office is a commendable recognition of the importance of these physical examinations. The first step in this accomplishment was the appointment last February of Doctor, now Colonel, Frank Billings, who was assigned as medical aide to the Provost Marshal-General. But since that time

the medical phases have developed to such an extent that the enlargement of this position into a specific division in the Provost Marshal-General's Office inevitably followed. The personnel of the medical division consists of Col. F. R. Keefer, of the regular medical corps, chief, assisted by Major Hubert Work and Capt. D. Chester Brown. This personnel will be enlarged as required. The new selective service law will involve the registration and physical examination of some 14,000,000 men. This will have to be accomplished in a much shorter time than was allowed to the same duties connected with the less than 10,000,000 men covered by the first selective service law. It is possible that the present machinery, so far as physical examinations are concerned, is not ideal. There is no doubt that some of the criticisms of the method of conducting physical examinations of registrants in the past have been to a certain extent justified. But there is no time to create new machinery, even though such might be necessary to secure ideal conditions. The medical division in the Provost Marshal-General's Office is already correcting faults here and there. We may look forward to the physical examinations of the new inductees to the Army with optimism and with the hope and belief that there

will be less cause for criticism in the future than, perhaps, there was in the past.—Journal A. M. A., Aug. 31, 1918.

MEDICAL MEMBERS OF LOCAL AND DISTRICT APPEAL BOARDS

A number of the medical members of local and district appeal boards have resigned to accept commissions in the Medical Corps of the Army; more than a hundred were commissioned during the month of July. While their action in the great majority of cases has been prompted by purely patriotic reasons, some undoubtedly have acted in the belief that they would be subject to draft under the new Selective Service Law, and preferred to secure commissions, before being called. These resignations have already seriously crippled many of the boards. It is for this reason that the Provost Marshal-General has taken action to prevent as far as possible such resignations in the future. It must be remembered that the Selective Service Law, in creating these boards, is specific in defining the functions of the members and the punishment for neglect of duty. The regulations state that members of these boards are as effectively "drafted for this duty as are registrants who are selected for military service." The only way in which a member of a local or district appeal board may resign is by application for relief directly to the governor of the state. The governors have now been asked not to accept such resignations, and draft boards have been cautioned not to release necessary medical members without the sanction of the Provost Marshal-General. The needs of the Provost Marshal-General's Office are regarded as paramount, and the Surgeon-General is requesting lo-

cal examiners for the Medical Reserve Corps, in forwarding papers of applicants, to indicate whether or not the applicant is a member of a Selective Service board. Undoubtedly, if there is a competent examiner available to take the place of the one who desires to resign, the resignation will be accepted. These comments apply to medical members of local and district appeal boards only; not to members of medical advisory boards.—Journal A. M. A., August 31, 1918.

THE NEW SELECTIVE SERVICE LAW AND PHYSICIANS

Few of the questions now being asked by physicians as to how the new draft law will affect them can be answered until the regulations are issued by the Provost Marshal-General. There are some 75,000 physicians in the United States under forty-five years of age. Those holding commissions in the Medical Department of the Army, Navy and Public Health Service are not required to register. Members of Local and Appeal boards, although required to register, as stated elsewhere, are considered as drafted for this duty, and therefore are exempt from general military service. There should be no difficulty now in securing a sufficient number of physicians for the medical needs of the Army and Navy. While a sufficient number undoubtedly could have been secured by the voluntary system, under the new order of things there certainly will be an ample supply. The important fact is that now it will be possible to solve the problem as to securing the number of physicians required for military service without seriously inconveniencing the civilian population. The new law provides for

the exemption by the Selective Service Boards of those engaged in necessary "occupations and employments." Special regulations governing the application of the law to physicians will be necessary: the demands on the supply are so many and so complex. Two weeks ago The Journal stated, "It would seem possible to formulate regulations which would receive the approval of the Surgeon-General of the Army and of the Provost Marshal-General, which would practically place all physicians of draft age under the jurisdiction of the Surgeon-General of the Army." The only satisfactory solution of the whole problem is through the co-operation of the Surgeon-General of the Army and the Provost Marshal-General. The obvious necessity of this makes it practically certain that such co-operation will be effected. Specific regulations must be formulated to guide the Selective Service Boards, the ultimate object being to place the disposal of drafted medical men in the hands of the Surgeon-General. The ideal way would be to draft all physicians under forty-five years of age, to commission them in the Medical Corps of the Army, and to place them at the disposal of the Surgeon-General of the Army, who would place on the inactive list those required in civil life. The demands on the medical profession are: (1) military and naval—including medical examiners for Selective Service Boards; (2) institutional—including medical colleges, hospitals, state asylums, etc.; (3) industrial—including sanitation and the care of employees in munition and other large manufacturing plants; (4) public health—including national, state, county and municipal health officials; and (5) civilian practice. The Surgeon-General's Office already possesses data covering most of these

needs, and has available a complete survey of the medical conditions in civilian communities.—*Jonr. A. M. A.*, August 31, 1918.

The following are abstracts of articles in the issue of *The Journal*, Aug. 31, 1918:

ANAPHYLATIC SHOCK

L. F. Frissell, New York (*Journal A. M. A.*, Aug. 31, 1918), reports a case of cerebrospinal meningitis with anaphylactic shock, treated by intraspinal administration of serum, which, however, failed to desensitize the patient, though she ultimately recovered. He thinks an error was made in the treatment by assuming that the intraspinal administration of the serum would necessarily desensitize, and in the future he would always administer the serum intravenously, by fractional doses.

SYPHILITIC REINFECTION

Joseph Spangenthal, Buffalo (*Journal A. M. A.*, Aug. 31, 1918), reports a case of syphilitic reinfection. The first appearance of the primary lesion occurred in September, 1913. The patient was a married man and had infected his wife. Both patients were treated by neosalvarsan and other specific treatment and recovered from this attack. At intervals of six months the patients reported for a Wassermann test which was always negative. In March, 1918, he developed another primary sore followed by secondary symptoms and two Wassermann tests were $\times \times \times$. This case seems to support the theory of the curability of syphilis, if it is admitted that it cannot recur in a cured case without having undergone complete recovery.

MENINGITIS

G. R. Kramer and W. B. Wright, St. Paul (Journal A. M. A., August 31, 1918), report a case of streptococcal meningitis in a pregnant woman in probably the eighth month. The patient died before the diagnosis could be made, but cerebrospinal meningitis was revealed by the necropsy. The fetus was well formed and well nourished and showed nothing pathologic but a meningitis showing the same organisms as those in the mother's case. The comment is made that Rosenow and others have proved that in a large percentage of cases streptococci isolated from lesions of certain parts of the human body will, when injected into an animal, localize in similar parts and produce like lesions in the animal. This case of meningitis in the mother and child in utero seems to the author to demonstrate a genuine case of elective localization of streptococci in the human body.

SPOROTRICHOSIS

A case of sporotrichosis resembling tuberculosis cutis is reported by J. S. Eisenstaedt, Chicago (Journal A. M. A., August 31, 1918). The diagnosis was confirmed by bacteriologic examination. Eisenstaedt holds that it would fall under the heading of disseminated ulcerative sporotrichosis, which is undoubtedly of hematogenous character and which frequently, as in the case here reported, is unassociated with any trauma known to the patient. The tonsils or elsewhere in the pharynx seems to have been the possible site of entrance. The important diagnostic features, the author says, to be kept in

mind are that the disease when localized in the skin may appear in a variety of forms and the especial form following the course of the lymphatics is only one of these. One should consider seriously sporotrichosis in the differential diagnosis of lesions of gummatous-like or nodular character which are indolent and painless and which persist in spite of ordinary treatment without generally reducing the health condition of the patient. Eisenstaedt believes that faulty diagnoses are often made because of the neglect of bacteriologic examination, the technic of which is simple and usually definite in its findings. Even when bacteriologic facilities in a laboratory are lacking the fungus grows readily on potato. Many cases he believes go unrecognized or are called by some other name.

BRONCHOPNEUMONIA

W. G. MacCallum, Baltimore (Journal A. M. A., August 31, 1918), reports the results of his study of an epidemic of bronchopneumonia at Camp Dodge, Iowa, where the surroundings and environment generally were very different from those attending the bronchopneumonia epidemic previously reported by him at Camp Houston, Texas. There were no great numbers of measles patients at Camp Dodge, and methods of isolation and sterilization were thorough in the hospital. The great spread of infection appeared to be in the camp itself. During the winter there was a moderate amount of pneumococcus pneumonia with low mortality, but on March 20 this mild pneumonia was replaced by a severe disease which began in an organization of Alabama negroes and spread rapidly to other portions of the camp.

Throughout this epidemic pneumococcus infections resulting in lobar pneumonia continued to appear. From the hole, the author thinks it justifiable to hold that the *Streptococcus hemolyticus*, whether preceded by predisposing disease like measles or not, may cause extensive and fatal epidemics of a peculiar bronchopneumonia usually affecting the framework of the lungs and the bronchial walls so as to suggest the name interstitial bronchopneumonia, especially severe if following measles. Associated with it there is often a diffuse or patchy lobular pneumonia, with the streptococcus finely scattered in the alveolar exudate, and when such areas are confluent they may resemble a lobar pneumonia. Ulcerated laryngitis, possibly causing deep destruction of the vocal cords, and epiglottitis occur in these acuter cases, especially those after measles. Empyema is also extremely common and has been generally recognized, but other complications are not so prominent. Pericarditis, peritonitis, otitis media, and occasional abscess are mentioned. Hyaline degeneration of the muscle fibers of the rectus abdominis, quite similar to the nicker's degeneration in typhoid fever, was observed in one case in which it caused rupture of the muscle. It seems to have been due to an extension of the infection in the degenerated muscle.

HYPOPHYSIAL TUMORS

A. W. Adson, Rochester, Minn. (Journal A. M. A., Aug. 31, 1918), calls attention to the introdural method of operation for hypophysial tumor, and gives the details of the technic of the introdural approach after an osteoplastic flap has been turned from

the right frontoparietal region. The dura is opened widely to permit the exposure of the frontal lobe, which is protected with cotton and rubber tissue. The lobe is then elevated gently until the optic commissure and the hypophysis are exposed. The author reports six cases. A case of nasopharyngeal tumor projecting intracranially producing visual disturbances is presented for comparison. In two of the six cases, the patients presented very definite bitemporal hemianopsia, with more or less complete loss of vision in the left eye. "One patient had a complete loss of vision in the right eye for ten years, and a left temporal hemianopsia; one presented a typical acromegaly syndrome with a temporal color hemianopsia and constricted object field; one had bitemporal hemianopsia with more or less distorted fields in the left eye, and one had blindness in the right eye with definite neighborhood symptoms producing a frontal lobe syndrome of pressure and localization, involving the uncinate gyrus. Postoperative convalescence was uneventful and rapid in all but one case, in which the patient died on the second day. In two cases there was complete restoration of vision, in two marked improvement in vision, and in one a relief from headache. In the case of blindness in the right eye which was complete for ten years, the patient has begun to have a return of vision. The patient with acromegaly is having metabolic changes. In five cases there has been definite improvement. In one, no visual improvement, but relief from pain was obtained." The special advantages are its easy approach and dry field, the exposure permitting the dissection of the tumor from the optic nerves and commissure, and a removal of all parts that are needed. The sponging is done against the floor of

the sella instead of working upward against the commissure and nerve peduncles. The operation is no more formidable than craniotomy of the frontal lobe, much depending, of course, on the skill of the operator. The article is very fully illustrated.

RURAL SANITATION

The responsibility of the nation, state and county for rural sanitation is the subject treated by W. S. Rankin, Raleigh, N. C. (Journal A. M. A., Aug. 31, 1918). He divides it into three sections, the first of which is the size and nature of the problem. It has to do with 60,000,000 people, and is the larger part of the general problem of sanitation in this country. In nature, rural sanitation is primary and fundamental to sanitation in general; in the natural order, the country and then the city. The vital current flows from the country to the city, and "purify the stream at its source" should be the rule. It concerns, moreover, a population least able, both in knowledge and means, to care for itself. The recent draft has shown 33 per cent. of the healthiest age group unfit for military service, according to the standards used, and this is enough to raise the question of general responsibility of the government, and the problem is not an intrastate but an interstate problem, a national problem from many angles. The present international crisis makes the man power of the entire nation a matter of fundamental importance. County and state lines have been almost obliterated in its consideration. The three governments, the national, state and county governments, are like partners in a firm of

which the common citizen is the capital. The national government is the largest stockholder and is the best equipped in both means and understanding. Hence the need of the adoption and the inauguration by the federal government of a definite, comprehensive and adequate plan of rural sanitation, recognizing the principles of the co-ordinate responsibility of all. There must be a plan of rural sanitation satisfactory to all, and all three interests must combine and help in making it effective. Fortunately for those of us who believe in this principle of co-ordinate responsibility, we have with us the public health agencies and the departments of the general government that have most to do with rural living conditions, namely, those of commerce and agriculture. These have been instrumental in securing co-ordinate legislation for agricultural education and for good roads, and if similar methods are enacted for the problem of rural sanitation, the federal government would appropriate say, from \$1,000,000 to \$2,000,000 annually to be apportioned to the several states and territories in accordance with the rural population and the square mile area of each state and territory, the state apportionment to be available to the state when the state appropriated a like amount to that received from the federal government; and the combined fund would be apportioned to those counties of the state that would appropriate one dollar for two of the combined federal and state apportionment. The total fund then available for the county would be expended on a plan of rural sanitation submitted by the county to the state board of health, approved by the state board of health, and then submitted to and approved by the public health agency of the United States government. Such a plan would

make available almost at once a sum which would enable each state board of health to begin the needed work.

PNEUMONIA AT A BASE HOSPITAL

A. A. Small, (Chicago) Camp Pike, Little Rock, Ark. (Journal A. M. A., August 31, 1918), gives an account of the pneumonia morbidity and fatality at Camp Pike, Ark., between September, 1917, and April 27, 1918. In this period there were 1,285 pneumonia patients; 857 of these had lobar pneumonia, and 428 had bronchopneumonia. In the beginning the cases were mild, and in both forms corresponded to the ordinary types seen in civil life. The mortality was low. As winter came on, however, the proportion of bronchopneumonia increased, and the mortality also increased, especially that of bronchopneumonia, which showed 53 per cent. fatal in January. After that the death percentages declined, being nearly parallel at the close of the prior mentioned. It is difficult, Small says, to give a definite reason for the difference in mortality in midwinter and the later months compared with that of the first two months. The antecedent measles may have been a factor in the bronchopneumonias, and also in a number of the streptococcus cases. The author thinks that the virulence of the organism must undoubtedly be increased by its passage through the human host. Many of the cases of bronchopneumonia began with the most trivial subjective symptoms, and practically no objective signs. A few fine moist rales, usually at the back and near the angle of the scapula, were often the only physical signs present, but in another twelve or twenty-four hours there would be marked consolidation

in the same area, increase of the moist rales, and often bronchovesicular or tubular breathing. Fever is usually not high and the pulse not rapid. Peculiar as it may seem, the majority of these patients showed no respiratory distress or dyspnea until near death. Cyanosis is rare, and expectoration is late and moderate. In contrast to the majority, we have an acute fulminating type, which is illustrated by the case history of a patient, who entered the hospital at 7:00 p. m. one day, and died the next morning at 6:00 a. m. He had been drilling the day before and complained of only slight ailments. Empyema occurred in slightly over nine per cent. of the total number of pneumonia patients. The types of empyema have been described by Dr. McKenna. Sputum examinations in forty-eight per cent. of the pneumonias showed the pneumococcus, Type I in twenty-one per cent., Type II in thirty-four per cent., and forty-five per cent. of Type IV. A number of patients were received with the diagnosis of meningitis, but the spinal fluid examination corrected this. The three most potent causative factors, Small believes, are the large number of men suffering from measles, the large amount of dust and the carelessness of the men in their barracks causing minor respiratory disorders.

THYROIDECTOMY

The temporary loss of voice following thyroideectomy is a complication that gives the surgeon untold anxiety and worry in his early thyroid work says Donald Guthrie, Sayre, Pa. (Journal A. M. A., August 31, 1918). There are several causes for this complication, appreciation of which by the operator

will lessen the liability of its occurrence. They may be put under four headings: (1) trauma to the inferior recurrent laryngeal nerve; (2) trauma along axis of the neck. Any rough to the larynx and trachea; (3) syphilis, and (4) hysteria. The trauma to the nerve is caused by pinching with clamps, including it in suture, stretching it in its sheath or by pressure from postoperative blood clot. One must understand the anatomy of the parts to avoid these. The dissection should begin well up on the side of the gland and not underneath it. It is important always to stay well within the capsule of the gland because the nerves lie behind it. In attacking the lower poles of the gland the forceps should be placed high up on it, parallel with the handling, forcible delivery of the gland, or dry gauze dissection in this region should be avoided, for it is here that trauma to the nerve takes place. In case of severe hemorrhage it is unwise to try to catch the bleeding vessels in a pool of blood. They should be found and clamped individually. It is well to remember the close proximity of the nerve to the lower pole and to the posterior surface of the gland. Judd, Mann and New have shown that if the nerve is pinched or included in ligatures or is under pressure by postoperative blood clot, there is temporary disturbance of function. Guthrie also thinks that stretching the nerve may be a factor in losing the voice from pressure of edema occurring later. Trauma to the trachea and larynx is a frequent cause of temporary loss of voice, especially in apprehensive patients, and care should be taken in dissecting out the gland to prevent this. The trachea that has been resected on by an enlarged gland will not stand the same amount of lateral pressure as a normal one.

The surgeon should rely on the services of a skilful anesthetist to guide him as to the amount of traction he should use. Other details of the operation are specified. Simonton believes that many enlarged thyroids are syphilitic and it would be well to have a Wassermann test taken beforehand. Guthrie thinks there is a strong hysterical element in many cases. Many patients anticipate loss of voice or rather fear it, and any unwise remarks or suggestions may do harm. Surgeons doing thyroid surgery show an average of from 3 to 5 per cent. of cases of temporary loss of voice, and from 20 to 50 per cent. of huskiness following their operations. The author has himself had 20 per cent. of huskiness, and 3 per cent. of loss of voice since following the methods here mentioned—a much smaller proportion than he formerly had when he gave less attention to safeguarding the nerve and trachea and did not recognize hysteria as an element in producing the complication. These conclusions are based on a clinical study of 1,102 goiter patients, 619 of whom were operated on. The article is illustrated.

NEUROCIRCULATORY MYASTHENIA

That the substandard soldier is a fact detrimental to army efficiency is pointed out by Andrew McFarlane (Albany, N. Y.) Camp Gordon, Atlanta, Ga. (Journal A. M. A., August 31, 1918). Therefore, one of the first steps in making a new army is to sort out those who are manifestly unfit and to a certain extent this is effected. But as the training becomes more intense, soldiers are reported by their regimental surgeons as having defects

that are serious, but not so obvious as to have caused their earlier rejection, and so far as they are concerned make the routine examination relatively worthless. McFarlane reports the results of later examinations of such cases at Camp Sevier, S. C. A cardiovascular detachment of ten tents was opened, and of forty-one patients referred to it, seven were found to have organic disease of the heart, and were referred to the disability board for discharge. Five were adjudged free from cardiovascular disability and returned to the command with a request for their further observation. "The remaining twenty-nine soldiers all had this in common: They were reported as inefficient soldiers, though no determinable organic cardiovascular lesion was found. They presented practically the same syndrome: marked cyanosis of the hands extending up above the wrists; coldness and sweating of the hands and feet; sweating under the armpits even when in a cold tent; tremor; flushing; marked lability of the pulse and blood pressure on standing or lying down, and after exercise; marked thrill, often felt over the precordium; no increase of cardiac dullness; booming first sound or indefinite murmur at the apex; frequent accentuation of the second pulmonic sound, and mental instability. After exercise these patients became more or less breathless and cyanotic, and complained of precordial pain, palpitation, giddiness and abnormal exhaustion." Full details of the defects are given in tabulated form, and also the results of examinations according to Pignet's formula. Only one of these men could be rated as strong, and examinations by nose and throat specialists revealed apparent foes in all. The British experience in this regard is referred to, but their problem was somewhat differ-

ent as the soldiers had already been to the front and were returned for inefficiency. In the great majority of cases the recognition of this substantial quality was not difficult. Similar conditions were noticed in the Civil War by DaCosta. In the British service the aim has been to build these men up with exercises, and similar methods were employed here. They were sent to the base hospital clinics for treatment of their teeth and tonsils, and graduated exercises were given each day, with graded hikes in the afternoon, all exercises being overseen by two physicians. The problem was to determine what each soldier could do with his own physique irrespective of height and weight. The scientifically graduated exercises were followed later by the graduated work of a soldier. Games and proper occupations were encouraged. In this way, by building up the system and training, the weakened muscles of some good soldiers could be saved to the country. Others might be employed for special service, and the remainder returned to civil life better and wiser for their army experience.

RUPTURE OF CESAREAN SCAR

C. R. Howson, Redlands, Calif. (Journal A. M. A., August 31, 1918), reports a case of fatal rupture of a cesarean scar in a pregnant woman, whose condition had lasted seven months. Her previous delivery, nine months before, had been by cesarean section with an uneventful recovery. In the present case, the symptoms of parturition were present ten hours before the final complete extrusion of the fetus into the abdomen, and the patient's death occurred still eighty hours afterward.

GOITER IN THE SOUTHEAST

E. G. Jones, Atlanta, Ga. (Journal A. M. A., August 31, 1918), reports his experience in a routine systematic study of 407 patients with thyroid enlargement. A classification of these cases, he thinks, cannot be entirely satisfactory, whatever the basis used. He began to list his patients under the groups suggested by Wilson and Plummer, but quite a large margin of error could not be denied, since the test of tissue examination is impossible in nonoperative cases. The classification of cases is given in a table accompanying the article. One hundred and forty-six (35 per cent.) were adenomas, and eliminating certain trivial cases, this number would be increased. While there are no available figures of the incidence of goiter, it is a matter of common observation that it is less frequent in the South than at least in many other parts of the country. In the region of the Great Lakes the author has more than once seen 50 per cent. of the waitresses in a restaurant with struma. He believes that one meets in the streets of Chicago from five to ten times more women with goiters than on the streets of the average southern city. Jones thinks that goiter is less frequent among negroes than among white people, but that the difference is not as great as it appears, since the former are not so liable to consult a physician for nontoxic goiter. Ninety-five (23.5 per cent.) of the cases observed, had one or more relatives with goiter, which is not, however, very significant. But with the inquiry restricted to the immediate family, he found that fifty-three patients had fifty-eight relatives with goiter. The sister is more frequently affected than the mother, and a family history is

only half as common with the toxic as with the nontoxic forms. No connection could be traced with the drinking water supply. Frequently in Groups 2 and 3 (nonhyperplastic toxic and nonhyperplastic nontoxic) there was nervous instability, lack of sustained physical endurance, usually a spare build and frequent transient tachycardia without good reason. Careful questioning will often lead to the view that the patient's thyroid plays a minor though perhaps real part in the production of her disability. Recently, Jones believes, the Goetsch test has added to his ability to judge the part played by the thyroid, the injection of epinephrin promptly producing hyperthyroid symptoms if the thyroid is overactive. No connection with pelvic disease was ascertained by his inquiry. The average age at which goiter was first noticed is 27.8 years, and the average age at which symptoms were observed was 30.35 in Group 1 (hyperplastic toxic), in Group 2 it was somewhat earlier. From the beginning of his study of goiter, the author has practiced resection of both lobes in diffuse enlargements. His conclusions are as follows. "1. The incidence in the Southeast of the several types of goiter departs in no significant way from the incidence in other areas where thyroid troubles are definitely endemic. Sixty per cent. of all goiters are listed as nontoxic; excluding from consideration the symptomless goiters of puberty, 64 per cent. of the nontoxic goiters are adenomas. 2. Goiter in this territory is relatively rare; the colored race exhibits less tendency to a pathologic condition of the thyroid than does the white race; men are less frequently affected than published figures indicate; the occurrence of nontoxic goiters in families is suggestive, but not significant; no particular water is un-

der suspicion 3. There appears in this series no significant relation between pelvic disease and a pathologic condition of the thyroid. 4. Maximum double resection in diffuse enlargements is wise."

THYROID SURGERY

C. H. Mayo, Cochester, Minn. (Journal, A. M. A., August 31, 1918), reviews the surgery of the thyroid and describes the development of the organ. The earliest surgery was followed by high mortality, until the period of antisepsis and asepsis developed safer methods. The thyroid is one of the most important glands in the body, though our knowledge of its functions is still incomplete. The work of Plummer and Kendall, however, is mentioned by Mayo as a great advance. The discovery of a thyrotoxin by Kendall and the subsequent researches of Plummer show that this thyrotoxin has a controlling influence on the energy production in the animal organism, and is the most active factor in the metabolism. Exophthalmic goiter or hyperthyroidism develops an enormous increase in the metabolic rate and thyroidectomy, complete or partial, in most cases will reduce metabolism to nearly normal. There is still much lacking in our knowledge of the activating agent causing hyperplasia of the gland, but Mayo thinks the discovery of this is probable. The simple goiters of adolescence are common, and do not call for surgery unless they give trouble or are too unsightly. Later in life the degenerations of the goiter are likely to occur. The older the person when goiter develops, the more quickly must degeneration occur. Simple types of goiter or aden-

omas often grow to enormous size and may project down into the chest. Mayo says that "the dangers incident to the operation are the condition of the patient, as in exophthalmie and thyrotoxic goiters, and those due strictly to the operation, as loss of blood, secondary hemorrhage, interference with respiration, injury to the recurrent nerves and to the parathyroids. The parathyroids and the recurrent nerve should be guarded in simple goiter by leaving the posterior part of each lobe of the gland on the posterior capsule, and by care in the use of forceps, and care in suturing the remainder of the gland and in the ligation of its vessels. Laryngoscopic examination should be made before operation to disclose the condition and the innervation of the vocal cords, as paresis or paralysis of an abductor or adductor may be present with but little change in the voice, and especially as unilateral tumors on the right side may produce paralysis of the left recurrent nerves, and surgical injury to the right side may result in total loss of voice. The parathyroids controlling the nitrogen elimination should be preserved as a guard against tetany. Local anesthesia may be used in special cases, but ether and local anesthesia are used in most instances. The best method of approach is through a low collar incision. The sternothyroid and sternohyoid muscles should be cut high and resutured if they interfere with the surgical exposure of the gland; greater experience seldom requires their division. The isthmus should be removed and double resection is the operation of choice in simple goiter, while in the exophthalmic type, removal of the larger lobe, isthmus and part of the remaining lobe is the most common procedure. Drainage is instituted for twenty-four hours in the majority

of cases, although the substernal goiter, the cavity of which does not immediately become obliterated by intrathoracic pressure, should not be drained longer than a few hours, at most, to retain a blood clot for organization; otherwise drainage in such cavities is indefinite." Recurrence may take place from not removing a portion of the gland in which the morbid conditions exist. Failure to judge the possibility of this is bound to occur in a small proportion of cases, but the cures by operation are practically 70 per cent. Plummer's work on metabolism taken with Kendall's on the chemistry of physiologic action explains many questions of recurrence that were formerly thought to indicate that surgery was not warranted. The results obtained by operation approximate what should be expected after the work of Plummer and Kendall, which Mayo says he considers at this time the most important advance made in medicine of the chemistry of life.

EMPYEMA

Hugh McKenna (Chicago) Camp Pike, Little Rock, Ark. (Journal A. M. A., August 31, 1918), reports the results of a study of 155 cases of empyema resulting as a sequel of the 1,300 cases of pneumonia treated at the Camp Pike base hospital. All the medical officers from the beginning were instructed to examine pneumonia patients carefully so as to determine the presence of pus in the pleural cavity. On the admission of these patients to the surgical service, after the condition was determined by roentgenography, blood cultures were taken. The roentgenographs and examinations were repeatedly made, and the aspirated fluids examined in the laboratory. The bacteriologic findings in

the pleural fluid showed *S. hemolyticus* in 101 cases and the *pneumococcus* in twenty-five; Type I was found in two cases, Type II in seven, and Type IV in six. Seven cases were not agglutinated. At the beginning the operation of osteotomy or thoracotomy was used as practically the routine method though in a few cases aspiration was carried out and 2 per cent. formaldehyd solution in glycerin was injected into the pleural cavity. In the drainage cases, as a rule, Brewer's tubes were used. In some of these cases negative pressure was produced by means of Woulfe's bottles. The separate pus pockets observed in many cases are of interest, and in order to drain these cavities an operation was devised in which 3½ inches of the fourth rib was resected and retraction was produced so that the gloved finger might sweep over the anterior border of the lung into this space, which allowed pus pockets to be reached anywhere between the diaphragm and the manubrium sterni. Observation of these cases gave a number of reasons for not opening the pleural cavity and the following plan was decided on: To investigate the disease very carefully and extensively by a team formed of members who were named from the surgical, roentgenologic, medical, laboratory, and bacteriologic assistants to which was added a specially trained nurse. Twenty-five patients have been operated on since April 1, with one death, and the prognosis for the others is excellent. One point in the operation is specially mentioned, namely, the drainage of the pleural cavity irrespective of the character of the pus, by means of a Number 14 French rubber catheter introduced by means of a trocar and cannula just large enough to thread the catheter into the cavity. The catheter is then con-

neeted with a 100 c.c. glass syringe, and aspiraion is intelligently and carefully carried out. If the pus is too thick for aspiration, a small amount of neutral solntion of chlorinated soda (Dakin's solution) is allowed to run in. This solution quickly liquefies the pus, so that by repetition of this procedure the entire cavity is emptied. The cannula is withdrawn, leaving the catheter in place, and one-half the number of cubic centimeters of Dakin's solution are allowed to run into, and remain in the pleural cavity as correspond to the quantity of pus aspirated during the operation. The process of aspirating through this catheter, and allowing the Dakin's solution to run in, is repeated by a trained ward surgeon three times a day, and two times during the night by an especially trained nurse. When, by examination, either physical, by the roentgen ray or by aspiration, separate pockets were found the same procedure was followed. The author regards this operation as having a number of advantages. It is a distinctly minor operation. It minimizes the chance of contamination of the pleural cavity from outside, permits frequent treatments, is not liable to form distressing sinuses, the pus from dependent cavities can be completely evacuated, solidified pus cannot form with the Dakin's solution injection, and danger of injury to the lung is lessened.

EMPYEMA EPIDEMIC

J. L. Miller and F. B. Lusk, Camp Dodge, Iowa (Journal A. M. A., Aug. 31, 1918), give an account of a streptococcus pneumonia and empyema epidemic at Camp Dodge in the early part of the present year. Though measles was quite prevalent through-

out the preceding winter, pneumonia was very seldom a complication until about May 1. The ordinary clinical lobar pneumonia due to the pneumococcus prevailed until about March 20; then, abruptly the streptococcus type predominated, with a very great increase in the incidence of the disease. From September 20 until March 20, the period of ordinary pneumonia, 276 cases were treated; from March 20 to May 10, 400 patients with pneumonia entered the hospital. The pneumonia during the early autumn was mild, though acute, and the course of the disease was short. In this series of 276 cases, empyema was present in thirty-one, or 11.2 per cent. In these early cases, however, there was a marked tendency to multiple pus foci and the mortality from empyema was high. Type II, typical and atypical cases, were twice as numerous as those of Type I and Type IV. Those of Type III were only 7.6 per cent. of the whole. The colored troops were much more susceptible than the white, and furnished nearly as many cases though they were only one-sixth of the total strength. Empyema was more fatal among the colored troops though less frequent. The mortality in the thirty-one empyemas was 61.3 per cent. The epidemic of streptococcus pneumonia appeared suddenly between March 18 and 20, continued with great severity for six weeks, then gradually became less intense, still continuing, however, May 10, at the rate of four or five cases daily. Its virulence, however, was less marked after the first three weeks. It was immediately recognized by the ward surgeon as a different form. "Evidence of severe intoxication appeared very early; empyema became very frequent and developed extremely early, two patients entering the hospital with pleural exudate who

had been drilling the day previous. While the involvement in the lung maintained a lobar type clinical evidence of complete consolidation was far from constant. Dulness with suppressed breathing and subcrepitant rales, but inconstant on localized bronchial breathing, were the usual findings; rusty sputum, provided there was expectoration, was the rule. Early roentgenoscopy showed that the infiltration was loar in character. The development of an exudate was often exceedingly difficult to determine by the ordinary physical findings, aided by the roentgen ray, and it became necessary to resort to frequent exploratory aspirations. These were often repeated several times before the fluid could be located. Early this exudate was only moderately turbid, contained numerous polymuclear leukocytes and showed on smear short chain streptococci. Gradually the fluid became definitely purulent." The bacteriologic findings in ninety-five of these exudates showed pure streptococci in eighty-eight, all being hemolytic. At the outbreak of the epidemic, a special effort was made to ascertain the predisposing causes or evidence of any infection antedating the onset. Mild sore throat was not uncommon as a preceding symptom and often in apparent good health it was ushered in with a chill. Some organizations furnished more cases than others. The roentgen ray was found useful as an aid to early diagnosis and localization. The colored soldiers developed empyema in 20 per cent. of the pneumonias and white soldiers in 45 per cent., and the empyema mortality was much less in the former while that of streptococcus pneumonia was nearly twice as great. Arthritis as a complication was rare and so was erysipelas. The treatment is briefly mentioned. All patients were put in



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special pneumonia wards and isolated by sheet curtains. In the early days of streptococcus pneumonia immediate drainage was resorted to, but as the mortality was very high this was discontinued. When the fluid became purulent, rib resection and drainage were employed. In conclusion they say that streptococcus empyemas might be divided into three groups: "(1) those who die early, no matter what form of treatment is instituted, from acute toxemia; (2) those with multiple pus foci, difficult to detect, because of the inability to locate and drain all foci; these all die, and (3) those who usually recover, either from early operation or aspiration followed by operation; here are included those with moderate toxemia and those with localized pus accessible to drainage."



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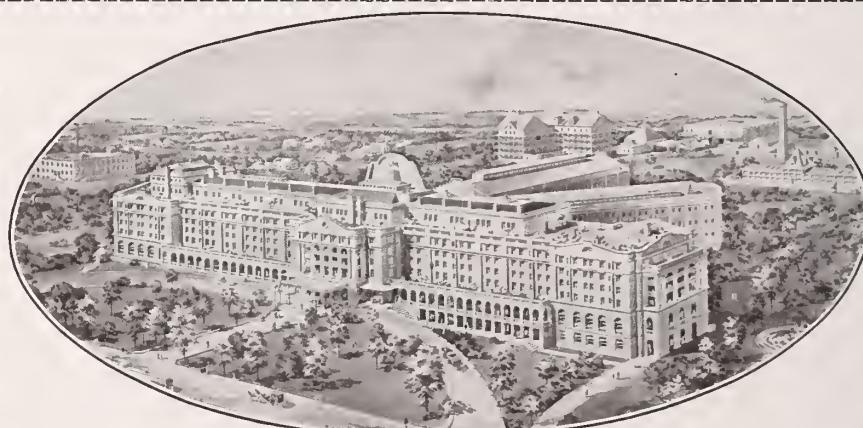


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EDITORIAL

INFLUENZA

At the present time the physicians of South Carolina, in common with members of the profession generally throughout the country, are having their mental and physical energies taxed to the utmost through the unprecedented demands made upon them by the prevailing epidemic of influenza. There are relatively few of us engaged in active practice today whose experience in medicine carries them as far back as the last great pandemic of this disease which occurred in 1889-90, and to most of us the high morbidity and absolutely high, though relatively low, mortality incident to the disease is instructive though depressing.

The scarcity of physicians and nurses in civilian practice, brought about by

the entrance of large numbers of these professions into the military forces of the country, has added greatly to the difficulties in handling the situation, and in some localities has been the occasion of a great deal of distress which would have been largely obviated under normal conditions. The physicians generally have responded in heroic fashion to the increased demands made upon them, and lay women have exhibited a commendable spirit in their desire to aid in the nursing of these patients.

In one important aspect the present pandemic differs from all others that have gone before, that is the rapidity with which the disease has spread. This is, of course, the result of increased facilities and speed of modern travel and the consequent greater mingling

of peoples from different sections.

Clinically, there can be no doubt concerning the identity of the present disease with that which swept over the world in 1889-90. The clinical descriptions given by the standard American, English, French, and German authors of the cases of the last pandemic conform in detail to the pictures that we are now seeing in profusion. There is one interesting discrepancy among these authors which is worthy of note. Some of the German writers found that there was an increase in the pulse rate proportionate to the rise of temperature, while the English and American writers mention the pulse-temperature disproportion as an outstanding characteristic of the disease. We are finding the latter condition in a striking manner in the present situation, the relatively slow pulse persisting at times in spite of the onset of pulmonary consolidation.

In view of such pronounced clinical similarity between the influenza of today and that of 1890, there can be little doubt but that the same infecting agent is concerned. As far as the bacteriological investigations of the present epidemic go they tend to conform in every way to the earlier studies. Pfeiffer's organism has never been conclusively accepted as the causative agent in this disease because of its presence in the absence of pathological processes, its almost universal occurrence in association with other micro-organisms, and because of its failure to reproduce the disease in lower animals. However, such work as that of Keegan in which this bacillus was found in pure or mixed culture in 82.6 per cent of pneumonic lungs examined post mortem, a pure culture of the organism being found in 31.6 per cent, would seem to fix the responsibility in part, at least, upon this bacterium. The details of etiology remain to be worked

out, and never have conditions been more propitious for this type of investigation.

In a general way the clinical aspects of influenza are so pronounced and typical as to necessitate little comment. But there are some phases of the disease which are of sufficient importance to warrant their mention. Practically every physician is destined to see illustrations of the four well-defined types of the malady: (1) the most common respiratory form with its train of complications, (2) the gastro-intestinal form which frequently manifests itself by abdominal pain, gastric and bowel disturbances, and extreme meteorism; (3) simple influenza fever, in which there is no selective tissue affection; and (4) the nervous type of the disease in which nervous and mental manifestations predominate. Care should be taken not to mistake the abdominal form of this disease for acute pyogenic infections of the abdominal viscera. The low leucocyte count in influenza will be of great aid in this respect.

An interesting and striking finding in many of the cases, even in those in which respiratory symptoms are very mild or lacking, is the so-called Grippe-lung. In the absence of percussion and auscultatory signs of consolidation, showers of fine, superficial, **sticky** rales are heard at the end of inspiration over the bases of one or both lungs. These rales may be very fleeting and disappear without further signs of pulmonary involvement showing themselves, or patches of typical bronchopneumonia may appear over the areas affected.

One of the most outstanding features of this disease seems to be the venous stasis which is associated with it. Even in those cases presenting mild respiratory symptoms, there is often a marked suffusion of the skin, a dusky com-

plexion, and a relative blanching of areas over which pressure is exerted. With the onset of pneumonia, cyanosis of the most extreme grade frequently ensues. There are three possible causes of this phenomenon, and they should be kept in mind because of therapeutic indications that depend upon them: (1) vaso-motor paresis resulting from the toxæmia; (2) failure of the heart muscle, especially a dilatation of the right chambers because of the increased resistance to the pulmonary circulation; and (3) inadequate oxygenation of the blood on account of massive and tenacious exudate in the air-cells and bronchioles.

The treatment of influenza consists of **rest in bed**, a simple diet, water, elimination, and measures directed toward the relief of symptoms. In the management of the secondary pneumonia, judicious therapy may play a decisive role. The opportunity here will arise chiefly in connection with evidences of vascular, respiratory, or cardiac embarrassment. Hydrotherapy, an abundance of fresh air, and, possibly, small doses of adrenalin will best serve to tone up the vaso-motor system. In many of these patients one is struck by the evidences of mechanical blocking of respiration. It is not uncom-

mon to find pneumonic involvement of four or even five of the pulmonary lobes, a hard, racking cough with little expectoration, and a polypnoea of forty to sixty per minute indicating a carbon-dioxid poisoning of the respiratory center. In such instances, it would seem that expectorants were certainly indicated. Small doses of potassium iodid or ipecac might be given to advantage in the earlier stages of these pneumonias. When obtainable, inhalations of oxygen should be employed. In the case of right-sided heart failure there is one remedy par excellence, phlebotomy, and its utilization should not be delayed. Five to six hundred cubic centimeters of blood can be drawn with perfect safety, there being nothing to lose and everything to gain.

Each of our communities may look forward to approximately six weeks of an active epidemic, the disease usually requiring from two to three weeks to reach its height and a corresponding length of time for the decline. But at the end of this time we shall not be through with our difficulties. We shall probably have endemic influenza throughout the winter months, and we cannot give too much attention to our preparation for handling this disease.

J. Heyard Gibbs.

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ORIGINAL ARTICLES

THE DIAGNOSIS OF APPENDICITIS COMPLICATING PREGNANCY

By George H. Bunch, M. D. Columbia,
S. C.

THE diagnosis of typical appendicitis is so well understood and the condition is so common that it would be presumptuous in me to write a paper on the subject to be read before this Association. The dull pain followed by nausea, the right side rigidity with tenderness about McBurney's point, the fever with leucocytosis make a clinical picture that is characteristic and when typical is unmistakeable. Everyone is agreed that the only curative treatment of appendicitis is Appendectomy. Yet, in Columbia, about 20% of the cases come to operation Ruptured. After rupture, appendectomy is no longer a simple operation without mortality. The operative field must be drained and if the patient gets well, during convalescence he has a foul discharge from the wound, with the possibility of post-operative Hernia and the certainty of post-operative adhesions.

In the pregnant woman every organ is under the strain of functioning for both mother and child. Her digestion is often impaired. She is usually constipated. Because of lowered resistance she is predisposed to infection. It is during this "Delicate State" that we physicians must be especially careful to watch over her, to diagnose complications early and to treat them promptly. Because a pregnant woman

is usually a nervous woman, and because pregnancy is a Physiological state that nature will relieve, we should not dismiss the patients complaints without investigation. Her troubles are real and may spring from a pathology that if unrecognized and untreated will terminate in disaster. The diagnosis of Appendicitis in the pregnant is no more difficult than in the non-pregnant woman. Yet in the pregnant it is seldom made because of the prevailing tendency of the profession to attribute the symptoms of the disease to the pregnancy. In normal pregnancy there is no pain, no tenderness, no rigidity until labor begins.

The differential diagnosis of appendicitis in pregnancy is interesting. Right sided pyelitis may so closely simulate appendicitis that from the physical examination alone it is impossible to distinguish between them. As the gravid womb enlarges and fills the pelvis it pushes the viscera upward and to the sides. The appendix is higher than before and lies nearer the kidney. So that the pain, the rigidity and the tenderness in appendicitis and in pyelitis may be identical. The fever and the leucocyte count are apt to be higher in pyelitis. Nausea occurs in both conditions. In Pyelitis the urine is loaded with pus and no matter how urgent the symptoms no pregnant woman should be operated upon without a microscopic examination of a catheterized specimen of urine. With classical symptoms of appendicitis we have operated upon one case of pyelitis. The patient was not relieved, and the diagnosis not made until the urine was examined. We have had several cases with appendi-

ceal symptoms cured by treating the pyelitis. We once had the embarrassing experience of the attending physician insisting upon appendectomy instead of immediate delivery in a desperately ill multipara having septic chills and sweats with high fever and urine full of pus. In biliary colic there is tenderness over the gall bladder. Colic from ureteral stone is most intense and is usually followed by blood and pus in the urine. 80% of urinary stones and 20% of biliary stones are shown by the X-ray. The differentiation between acute appendicitis complicating early pregnancy and extra uterine pregnancy may be difficult, but is not essential because both are abdominal emergencies capable of being treated through the same incision. In tubal rupture the attack of intense pain is so sudden that the patient often faints. There may be all the signs of severe internal hemorrhage. Fever and Leucocytosis come later and are due to secondary infection of the pelvic hematoma. Pelvic inflammatory disease does not often have to be differentiated from appendicitis complicating pregnancy for where there is bilateral inflammation in the tubes they become closed and conception is impossible.

The rule that appendectomy be done as soon as appendicitis is diagnosed applies with peculiar emphasis to the pregnant patient. A chronic appendicitis is a constant source of irritation, pain and indigestion to her. From pressure on the appendix there is apt to be disturbance of blood supply with lowered resistance to infection. In pregnancy an acute appendix is more liable to rupture. Perhaps the movement of the foetus causes rupture. All three of my cases of ruptured appendix, complicating pregnancy occurred about the fifth month of gestation, just a short while after foetal

movement was felt. Pregnancy does not materially increase the danger of appendectomy in clean cases nor is the operation more difficult. We prefer the gridiron incision well to the side. The muscles are split not cut. The wound heals readily so that the abdominal wall is left unweakened for the further distention of pregnancy and for the muscular strain of labor. The incision should be high depending upon the size of the uterus. It should be above McBurney's point. Retraction of the wound should be very gentle and the operation should be done with the least possible manipulation. Done in this way, not over ten per cent of the cases miscarry. A miscarriage after the first week can hardly be due to the operation.

Ruptured appendix in pregnancy is a very serious complication with a mortality of about 50%. There are several reasons for this. The appendix is in abnormal position, with an abnormal relationship. The great omentum is very movable. The small intestine has a long mesentery and is very movable. The cecum and ascending colon are somewhat movable but have no mesentery and are relatively fixed. As the womb enlarges, the more movable small intestine and omentum are pushed up under the costal margins into the places of least resistance. But the cecum with the appendix remains on the right side, compressed between the uterus and the abdominal wall. When perforation of the appendix occurs, neither the omentum nor the small intestine is available to wall off the infection and to prevent its spread. Diffuse peritonitis and not localized abscess, usually results. Our hope of curing any of these cases depends upon early operation with removal of the gross pathology, and drainage. In pregnancy, we can remove the pathology

but have great difficulty in securing and in maintaining adequate drainage. The imperfect drainage allow pus pockets to develop into secondary abscesses that can only be relieved by laparotomy. The patients are prone to metastatic infections. Convalescence is apt to be prolonged by septic complications that overcome the already weakened resistance of the patient and severely tax the diagnostic and therapeutic skill of the doctor. The incision must be longer, the trauma more, and the post operative shock greater than in unruptured cases. From the increased trauma and toxemia many of the ruptured cases miscarry. This, although it relieves the patient of the foetus, may by hemorrhage shock or sepsis be the straw to break the camels back and turn the scale against her.

I have operated upon three cases of ruptured appendix in pregnant women. They were young primiparas between the fourth and fifth months of gestation. Case one came into the hospital with a diffuse peritonitis and a temperature of 104. She died on the sixth day after operation of general sepsis. Case two had a large abscess to the right of the navel. The incision became infected and a hernia developed. She vomited more or less constantly for the eight weeks that she stayed in the hospital. She ran a septic temperature for weeks. The incision had to be lengthened and a secondary abscess drained at the end of the fourth week. Her urine was normal on admission but on the fourth and fifth week, she complained of pain and tenderness in the left kidney region. Her urine became dark red from blood presumably from the left kidney. The X-ray showed nothing definite. She became so weak and emaciated from the vomiting and the toxemia that we urged her to have the

womb emptied but she refused, saying that she had rather die than to miscarry. Retaining more food and gaining some strength, she went home eight weeks after the operation with the womb discharging freely. She continued to improve at home for four weeks and came back to the hospital in her seventh month with high fever, pain and tenderness under the left costal margin. Her urine was negative and her chest was negative. These symptoms gradually subsided with rest in bed and she returned home to give normal birth at term to an eleven pound boy. He is now about six months old and well. She is in good health, except for the hernia. Case three was an unmarried girl of eighteen with a few pus cells in her urine and a venereal history. She had a large appendiceal abscess, extending above the navel and beyond the mid-line. She was anemic, had been in bed for two weeks, and was very toxic. She stood the operation well but miscarried on the fourth day. After operation, her temperature fell for a while but rose again. She became tender on the left side above the pubis. Soon a mass developed. The abscess was opened and drained thru a median incision two or three weeks after her primary operation. During the twelve weeks of her stay at the hospital, she had pyelitis on both sides, first on the right and then on the left. She had phlebitis in the femoral and popliteal veins first on the left side, then on the right. She was very ill several times during her long sepsis; but a secondary laparotomy with good nursing and with repeated irrigations of the kidney pelvis thru the ureteral catheter finally saved her. After six months, she has gained her color and her weight and is in perfect health.

I have reported these cases somewhat in detail to show the high mor-

tality of the pus appendix complicating pregnancy and to show the long convalescence that the patient must undergo if she gets well. In closing, the lesson that I would leave with you is that in pregnancy the diagnosis of appendicitis offers no unusual difficulty; that early appendectomy in clean cases is safe; that the high mortality and the great morbidity of the pus cases can be prevented by operation as soon as the diagnosis is made and before rupture occurs.

URINARY CALCULI-DIAGNOSIS AND TREATMENT.

By E. C. Baynard, M. D., Charleston,
S. C.

THE choice of this subject as the title for my paper today was prompted by a knowledge of the obscurity or complexity of the symptomatology of Calculous disease; the, at times, exhaustive examination necessary to arrive at a definite diagnosis and the difficulty encountered by the Family Physician in dealing with these cases.

In the years gone by the Diagnosis of Urinary Calculi was made only by those few men who had had the opportunity of seeing numerous cases and who, in addition, were credited with enjoying more than their share of Diagnostic Intuition.

It was not until Urology had been established as a Specialty possessing instruments and Diagnostic equipment of more or less precision that the Diagnosis of Urinary Calculi was put upon a sound and Scientific basis.

It is today an utter impossibility to fully diagnosticate the presence or absence of a Urinary Calculus togeth-

er with the Pathology that may be produced by its presence without the technique and assistance of the Urologist and Roentgenologist. In other words the day of the "Clinical Diagnosis," as we understand the term has passed and the case under consideration should merit a most thorough Urological examination before any definite diagnosis can be established or any treatment instituted.

A brief review of the text-book description of the symptomatology of kidney calculi will prove more elegantly than argument the lack of dependence to be placed upon any symptom-picture that may be presented except in those few and seldom seen typical cases which constitute by far the minority. Take, for instance, the common trio of symptoms formerly supposed to be ever present in cases of Renal Calculi, namely: Pain, Renal Colic, and Abnormal urine. We understand by reports quoting the actual experience of various Urologists that these symptoms of this condition are of far less value than one would suppose.

To quote briefly from the latest text-book that I have seen ("Modern Urology" by Cabot) one cannot help but be impressed by the following statements: "While pain of some variety is an exceedingly common symptom of stone in the Kidney its entire absence is by no means rare. The so-called "silent stones" from a disquieting proportion of cases which have been discovered by modern methods of Diagnosis." In a recent analysis of our cases, pain was the presenting symptom in 33 per cent. and in the balance was so atypical as to suggest other conditions rather than stone."

In his description of Renal Colic he says: "This though by no means a characteristic symptom of Renal cal-

culus is yet a common one, occurring at some time in nearly half the cases." "Frequency of urination and vesical irritability have often been referred to as a common symptom in renal calculus during an attack. Evidence however, is accumulating (Braash) to show that most of these cases are in fact due to stone in the ureter, and I do not feel clear that pure renal calculus produces this symptom."

According to Cabot: "Abnormality of the urine is undoubtedly the most common symptom. This abnormality consists in the finding of albumin, pus and blood in varying amounts." "A persistently normal urine was found in 14 per cent. of our 150 cases and similar observations have been recorded by others. It therefore follows that while abnormality of the urine is of great value when present, normal urine cannot be considered as evidence of the absence of stone."

So much for Renal calculus and now a few words in regards the symptoms of Ureteral calculus. Here the picture changes and I believe that the symptoms described above are of far more importance and more value in the Clinical diagnosis of Ureteral stone than they have proved to be in the consideration of Renal Stone. According to Braash, the symptoms pain was present in 98 per cent. of the cases considered and he attributes this symptom to the obstruction and ulceration produced in the ureter by the stone. He finds Urinary frequency and bladder irritability more marked in Ureteral stone than in those renal in location and finds the seat of pain to correspond more or less closely with the position of the stone in the ureter as regards location—a significant fact in differential diagnosis. He finds too that the urine was normal in 20 per cent of these cases.

At a glance it would appear from the above that the diagnosis of a stone in the ureter would be a much easier proposition from a Clinical standpoint than the diagnosis of a Renal stone but I do not believe such to be the case. If one goes a little further into the subject he finds that according to Braash in this same series of cases in which pain occurred in 98 per cent. we find that 67 per cent. produced the pain in the region of the affected Kidney; 15 per cent. in the upper quadrant and in 9 per cent. it was found in the lower quadrant. These statistics bring to mind the following observations:

First: In the 67 per cent. of cases in which the pain was referred to one or the other kidney it would be impossible to differentiate clinically between a renal and ureteral stone or some other urological condition present in the kidney which would very easily produce the same pain.

Second: In the 15 per cent. in which the pain was referred to the upper quadrant it would be impossible to differentiate clinically between a ureteral stone and a stricture or some other urologic condition which would easily produce this pain and if it was a right sided condition it would be very difficult to differentiate from a gall bladder condition.

Third: In the 9 per cent. in which the pain was referred to the lower quadrant it would again be impossible to make a clinical differentiation. I have observed quite a number of strictures of the ureter which presented typical symptoms of a ureteral stone but in whom no stone was found after the most thorough and painstaking examination with all of the modern methods. Again if this pain is on the right side it may be very easily confused for an appendicular condition. We see at times cases of Appendicitis

which present a hematuria as one of its symptoms.

In attempting to make a Clinical Diagnosis of Urinary calculus several factors must be constantly borne in mind, the more important of which are as follows.

1. A stone may exist anywhere in the upper urinary tract and produce absolutely no symptoms whatsoever.
2. A stone may present a most complex symptomatology and in certain cases simulate other urologic conditions most closely.
3. A stone may produce symptoms resembling conditions extra-urological.
4. The fact that a most typical symptomatology of Urinary calculus may be present and yet upon examination no stone be found and upon other examination the cause of the symptoms be found to be extra-urological.
5. The fact that a Urinary calculus often exists where we least expect to find one.

These factors argue for a thorough and painstaking urological examination in all cases where no extra-urological condition can be definitely held to account for the symptoms present and of equal importance in all cases where stone is either suspected or known to exist in order that its location and character may be demonstrated, the damage it has produced exposed and the proper treatment of the individual case advised.

After this attempt to show the futility of a Clinical Diagnosis a brief description of what we consider the proper method of examination to be employed in these cases would be next in order. The technique as employed by us at the Riverside Infirmary, where we have equipped a Urological and X-

ray department may be briefly described as follows:

When the patient is first seen an exhaustive search is made into his family and past personal history; this is followed by having the patient tell us in his own way the history of the present attack. We believe search into his history to be most important from the standpoint of eliciting information that may lead us to detect the possibility of some extra-urological condition that may be present.

The physical examination of the patient then ensues and he should be examined with a view to determine any and all abnormalities that he may present and not solely with all attention centered upon the possible urological condition suspected. The physical examination in cases of Urinary calculi does not avail us of very much information. In renal calculi, for example, nothing would be detected until the kidney had become enlarged as a result of conditions produced by the stone which, of course, would be in the late stages of the affection. In Ureteral calculi it shows us practically nothing and is of really more value in large stones of the bladder than in any other condition of this nature. This is especially true in those cases in which the patient is a woman and when by Bimanual examination the stone is felt between the examining fingers. The stone -searcher we do not use as we do not consider the results of any especial value even when positive for the reason that there is so much information desired as regards size, number, location, changes found in the bladder as complications, etc. etc. The urine is subjected to a most thorough urinalysis and a gross functional test made when the patient is first seen. After carrying out these procedures we then consider the patient ready for the X-ray examination—during which

every part of the Urinary tract is thoroughly gone over and examined. We prefer to X-ray our patients before they are Cystoscoped for the reason that in our experience it often saves the patient a repetition of the Cystoscopy.

After the Roentgenological examination has been completed the Cystoscopic examination is instituted and often when completed is followed by a combined Cystoscopic and X-ray examination. The Cystoscopic examination as usually carried out is done with the intention of discovering any and all abnormalities presented by the Urinary system. The Bladder given a complete visual examination; the appearance of the ureters and the Urinary spurt noted; the ureters then catheterized and careful note taken of the presence or absence of any obstructions within the same; the size of the kidney pelvis estimated, specimen of urine obtained from each kidney and finally a differential functional test made.

In the event that the X-ray examination has been negative in result wax-tipped catheters are passed and scratch marks carefully searched for. In the event that the X-ray shadows has shown apparently in the Kidney or its pelvis leaded catheters are passed and another exposure made and this is often followed by a Pyleogram to ascertain whether or not the stone is in the Kidney pelvis or in the substance of this organ and if in the latter to determine as closely as possible the exact location of the same so as to enable the Surgeon to remove it with as little trauma to the Kidney as possible. If the X-ray has shown shadow or shadows apparently in one or the other ureter the leaded catheters are introduced to ascertain whether or not the shadows are really stones in the

ureter or are caused by conditions extra-ureteral.

Bladder stones are diagnosed by means of the Cystoscopic examination in which a thorough visual examination is made with a view to determine in addition to the presence of stone the presence of diverticuli, enlarged prostate or any other condition tending to the formation of conditions additive to the collection of residual urine. These conditions if found to be eradicated at the time the stone is removed. The X-ray is also employed in these cases and our technique is first to distend the bladder with oxygen for the reason that we are often able to show stones with this technique that we could not show by simply X-raying the bladder as it was. This is especially valuable in those cases that on account of age, etc., cannot be cystoscoped.

In closing the discussion of the Diagnosis of Urinary Calculi I would beg leave to call to your attention this fact: The earlier the Diagnosis is made the more favorable the prognosis for remember that a stone in the ureter which causes a partial obstruction usually results, if let alone, in Hydro or Pyo-nephrosis with a consequent total destruction of the kidney, or if the obstruction is permanent complete Atrophy of the kidney results.

In regards the treatment of Urinary Calculi I merely wish to call attention to the fact that no case can be intelligently treated unless the patient has undergone a careful and complete examination in which every phase of the patients condition has been studied.

The variety of treatment depends upon the conditions found especially with a view to the future welfare of the patient following operation. In Ureteral Calculi I would like to call attention to the success that I have experienced in removing them via Cystoscope especially through the employ-

ment of Papaverin Sulphate although the other techniques employed have in several cases been of considerable value. I wish merely to mention this variety of treatment for the reason that any procedure that would pre-

vent the patient of having to undergo a major surgical operation should at least be given a chance to prove its worth before the operation is undergone.

ABSTRACTS

ABSTRACTS OF THE PROCEEDINGS OF THE FORTIETH ANNUAL CONGRESS OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION.

Held at Atlantic City, New Jersey, May 27-29, 1918.

By Emil Mayer, M. D., New York, Abstract Editor.

The president, Dr. Thomas H. Halsted, Syracuse, New York, called attention to the fact of this fortieth anniversary comprising practically the whole period of modern laryngology.

He paid a tribute to the memory of Dr. E. Fletcher Ingals, a founder of the association, who died but a few days before the meeting, and who remained to the last an Active Fellow, furnishing last year one of the most valuable papers of the meeting.

He welcomed, also Dr. H. S. Birkett of Montreal, one of the fellows of the association who, responding promptly to his country's call, had spent nearly four years in active service, rising to the highest rank and responsibility.

Each fellow of this association feels a personal pride in these achievements.

Of an active membership of eighty-two, thirty per cent are in the active Naval and Military Service of the United States, which is a very credit-

able showing, considering the average age of its fellows.

The speaker then presented for the subject of his address:

A Diagnostic Clinic for Pay Patients.

While organization of hospitals for the care of ward cases and dispensaries for free ambulatory cases have been well organized, there has been no combined arrangements for the care of private patients, hence it frequently happens that a diagnosis cannot be made because of the expense involved in calling in as many physicians as the case really demands.

Oftimes the patient seeks relief by consulting various physicians of his own volition, producing disappointing results.

It sometimes happens that the right physician is accidentally consulted, and the cause of the obscure symptoms found, with a resulting cure.

It is for the profession to devise the means of correcting this very grave fault. As a result there have arisen many institutions where the medical staff is comprised largely of specialists of different branches. While some of these institutions are excellent in every way, the great majority are not of this character, and as long as they are purely commercial organizations they never will be.

The speaker said that the scheme devised, worked out and practiced for nearly three years by the Clinical Club

of St. Luke's Hospital, San Francisco, offered the best foundation from which to build a diagnostic clinic, and that it had met this particular situation.

The medical staff of this hospital consists of twenty-four full staff members, four consultants and ten assistants, with an excellent clinical laboratory and complete X-ray department.

In the hospital to which the speaker is attached, the first choice was given the regular staff, after which the assistants were given an opportunity when vacancies arose. The staff was divided into two groups serving on alternate months, with a third group known as the auxiliary group, made up of those specialists whose services would not be required in every case. The latter become available in any case in which the group chairman thinks such service desirable.

The chairman is responsible for the history of the case, and after his examination is made arranges for the visits of the other members of the group, together with such members of the auxiliary group as he may desire. A supervising nurse keeps the records and attends to the financial end of the work, sees that specimens are furnished the laboratory, arranges the details of the physician's visits, is present at all examinations, typewrites the notes and attends the general consultations, taking the minutes and transcribing them.

After all examinations, clinical and laboratory, have been completed, a general consultation of all who have had to do with the case is held, and every possible diagnosis arrived at, the physician referring the case being present and participating in the consultation.

A satisfactory conclusion having been reached, a report is sent to the referring physician, a second copy to the patient or his responsible relative

whenever this seems desirable, and a third retained in the files of the clinic.

Only cases that are obscure and complicated and apparently cannot be diagnosed by the average physician, are accepted by the clinic.

A minimum fee of \$50.00 and graded upward, according to the patient's financial situation, is charged. Such fee includes the services of the medical man and of the laboratory and X-Ray department, as well as of the supervising nurse. In addition, the hospital charges regular room rates for time occupied.

The portion of the fee remaining will be finally divided equally among those who have examined the case, to be received by them individually or be voted by them for the purchase of new equipment for improving the service of the clinic of the hospital, the latter being expected to be the disposition of the funds for some time to come.

In rendering this service they will themselves receive much knowledge and should benefit greatly through these examinations and consultations, adding materially to their diagnostic ability.

The hospital will benefit by the steadily increasing efficiency of its staff.

Finally, the speaker called attention to the work of its committee in the National Council of War Defense, and requested a quick response to the appeal of the Surgeon General for voluntary medical service to meet the demands of the drafted army.

Each man must weigh the matter for himself, and putting aside any argument and all questions of personal advantage, reach a decision that he will be willing to submit to the scrutiny of his fellows and abide by their decision. Those who can go are to be congratulated; they are to be envied; they are the favored ones of the profession. A doctor who in this emergency can con-

scientiously go and fails to respond to his conscience and his country's call, putting a selfish profit first, is not to be envied but to be pitied.

To commemorate the fortieth anniversary of this society, a historical review of the early days of laryngology was read by the honorary president, Dr. J. Solis Cohen, of Philadelphia, followed by Dr. D. Bryson Delavan, of New York.

The scientific program then followed with the papers and discussions here presented.

REPORT OF SOME INTERESTING CASES OF VINCENT'S ANGINA

Clement F. Theisen, M. D., Albany

There are two distinct clinical types of the disease, one form to be differentiated from diphtheria and other pseudomembranous anginas occurring almost exclusively in young people, while the other form has a localized ulceration simulating syphilis occurring mainly in adults, usually, in the writer's experience, associated with carious teeth, especially in those whose mouths are not well cared for.

The odor is distinctive and characteristic, and if not promptly treated, extensive ulceration of the fauces occurs with fatal ending.

The writer has had two fatal cases. One previously reported in 1912, and the other a recent case in a man thirty-two years of age. The uvula and part of the soft palate had been practically destroyed, and there was deep ulceration of both tonsillar surfaces and of the gums around the last molars. The ulcerated surfaces were covered with a tenacious pseudomembrane. The molar teeth were badly decayed, and the gums bled easily when touched with a probe. The odor was so bad that it required a good deal of courage to ex-

amine him. He said the condition had been going on for several weeks, and he had received no treatment. He had been using a mouth wash of peroxide and water.

He was in an extremely weakened condition, because the pain in swallowing was so severe that he had not been able to take much nourishment. No history of syphilis could be obtained. Smears from throat swabs verified the diagnosis of Vincent's angina.

He was given a strong solution of potassium chlorate, powdered alum, carbolic acid, glycerin and water, to be used as a gargle, and locally the ulcerated surfaces after cleaning were swabbed with a saturated solution of methylene blue in alcohol. He was given K. I. in large doses. This is always administered in the writer's case, whether a history of syphilis is obtained or not. Blood count showed a moderate leucocytosis. He failed steadily in spite of all efforts, and died about two weeks after he was first seen. The larynx was not involved in this case.

Salvarsan was used both locally and intravenously without any appreciable effect. No autopsy.

Pure alcohol swabbed on the ulcerated surfaces is also extremely valuable. The greatest difficulty is in having the severe cases get enough nourishment, because the pain in swallowing is often so great. A solution of orthoform in olive oil, swabbed on the ulcerated surfaces before meals, affords a certain amount of relief. A spray of carbolic cocaine in the worst cases gives more relief than anything else, if used a few minutes before meals. In some of the adult cases of the ulcerative type we are probably dealing with a combination of syphilis and Vincent's, even when we fail to obtain a history of syphilis. That may be one reason why salvarsan acts so promptly in some

cases, although the concensus of opinion would seem to prove that the arsenic preparations do have a specific action. He has known cases of this kind in which there was a positive Wassermann (with no syphilitic history), with the typical clinical and microscopic evidence of Vincent's.

DISCUSSION

Dr. Christian R. Holmes, Cincinnati: I should like to ask as to the temperature of the patients; whether blood cultures were made in the two severe cases, and how he used the alcohol treatment—by applying it locally or not. In Camp Sherman we had quite a run of Vincent's angina in the soldiers; but none of them were seriously ill. All were the kind of cases that yield readily to treatment.

The treatment was nitrate of silver bead applied in the crypts, using it on a heavy silver wire, the patients using gargles of permanganate of potash and peroxid of hydrogen. Gargling with vinegar diluted with equal parts of water was tried lately and appeared very effective.

Dr. Lewis A. Coffin, New York City: We have had many papers on this subject. From these it is evident that patients have gotten well under various forms of treatment. It strikes me therefore that if these cases are seen early, recovery may be looked for, if any of the various methods be applied vigorously. The speaker referred to a case which he treated twice daily for about a week, when he told the patient that he was practically well and need not return for forty-eight hours. The same afternoon, after sitting out during a ball game, he was seized by a chill, which was the ushering in symptom of a typical attack of follicular tonsillitis.

Col. Herbert S. Birkett, M. D., Mon-

treal, Canada: Perhaps there is no condition which is more prevalent than Vincent's angina amongst British troops. I seldom saw it in any of the colonial troops, and this I think arises from the fact that the mouth conditions are very well cared for amongst the Canadians. The condition was found not only on the tonsils but also on the gums, even as far forward as the incisor teeth; it would seem as if this was due rather to direct infection. My experience with this condition is that it yielded rapidly to treatment consisting of an application of hydrogen peroxide, liquor arsenicalis and vineeae.

Dr. Emil Mayer, New York City: It is relatively easy to make a diagnosis of Vincent's angina when there is an exudate and you can make a smear; but I saw some days ago an instance in which the diagnosis comes to me as a very great surprise. This was in the case of a lady who took good care of her teeth, and was a woman of much refinement. She consulted me on account of a spasmodic cough. She had a skin affection for which she was being treated. I saw a simple mild exudate on her soft palate, which I felt to be an evidence of the skin infection on her mucous membrane. I felt that she had a similar condition on her trachea, because of the negative result of all of the examinations. Her sputum was really more saliva than anything else; and I was intensely surprised at the report that it was full of the fusiform bacilli. There was an absence of anything like a membrane, yet the condition occurred, and in a person not neglectful of her teeth or anything else; so it probably occurs much more frequent than we really have a right to expect in this class of cases.

The treatment that has answered best for me has been the local application of salvarsan, together with the

iodine and glycerin, which I recommended at the time the first case was reported by myself in the English literature. I have never seen the severe fatal cases. Arrowsmith reported a case in which the patient nearly died. I think that it behooves us to be on watch, because we may probably discover cases where we do not dream of them.

Dr. Greenfield Sluder, St. Louis: Dr. Theisen spoke of a solution of methylene blue in alcohol alone. I am glad to know that; but I have also used methylene blue in powder and in aqueous solution, and likewise found it to answer the purpose.

Dr. Clement F. Theisen, Albany, closing: Replying to Dr. Holmes' question regarding blood cultures, I would say that we did not take blood cultures, but we took blood counts; and the leukocytes in both cases were increased. I forgot to mention the increase in the polynuclears, and also to mention a method of treatment—a combination of old drugs which is practically a specific, either as a gargle or in the spray form. This combination consists of potassium chlorate, powdered alum, glycerin and water. It works like a charm. The alcohol is used locally.

REPORT OF SOME CASES, MOSTLY TRAUMATIC, OF SERIOUS DAMAGE TO THE NOSE AND ACCESSORY SINUSES, OPERATED UPON EXTERNALLY, WITH EXCELLENT COSMETIC RESULTS

John R. Winslow, M. D., Baltimore

The writer reports a number of cases of operative cure after serious injury to the face:

1. Extensive traumatism of the nose, face and frontal sinuses due to a fall from a height. Operative cure with exceptional result.

2. Frontal empyema with extensive bone necrosis and external fistula, operated upon externally in several sittings. Cure of condition with excellent cosmetic result.

Several interesting points were presented by this case:

(a) Lack of intranasal pathologic conditions. A virulent infection (erysipelas?) seemed to have attacked the frontal sinus and uppermost portion of the bony framework of the nose without involvement of other nasal sinuses.

(b) The posterior (cerebral) sinus wall was denuded, but was hard and seemed devitalized rather than necrotic. It took a very long time for it to regenerate (twenty-six months), but his own judgment and the advice of colleagues was that it was better to delay than to assume the risk of removal.

(c) Marked anesthesia of the operative field, the packing being for a long time painless, doubtless due to the devitalized bone.

(d) Excellent cosmetic results.

3. Fracture of the external bony framework of the nose and the nasal septum by the kick of a mule, causing depression of the tip of the nose and great disfigurement. Restoration of appearance and function by operation.

4. Fracture of the right nasal bone and nasal process and a portion of the orbital process, by an iron rod; formation of sequestra and abscess, with secondary infection of the right antrum. Operation and cure, with good cosmetic result. Photographs showing their excellent results were presented.

DISCUSSION

Dr. John E. Winslow, Baltimore: I should like to hear from Dr. Coakley or some of the other experts, as to the proper plan of treatment under such conditions as I have described, where there is necrosis of the cerebral wall of

the frontal sinus. How long are we justified in waiting for nature to attend to it? Did I wait too long, or was I too conservative?

Dr. Cornelius Coakley, New York City: When I have operated on the frontal sinus I have never found actual necrosis of the wall unless there had been syphilis. It is unusual for me to find such a condition. What I have found is that in cases that have been operated on previously, there has been a temporary cessation of the discharge with fistula formation. When I have opened up the frontal sinus in these cases it has not been infrequent to find areas of very marked softening in the bone, such as one finds in a mastoid operation at the borders, when one has gotten back to where the large cells are and come to the cells just between these and the cancellous bone. I think that there is no reason why that bone should not be regarded as infected bone, just as in the mastoid region; and I feel that neglect to clean out this diseased bone and get down to healthy bone, whether in the anterior wall or anywhere else, is not good surgery. You should get to good bone, even if you expose the dura in the frontal region.

In one instance I found such a degree of softening of the posterior wall that I felt sure that I should find exposure of the dura and epidural abscess. Fortunately, however, that was not the case. I went through an area of three-eighths of an inch of vascular soft bone before coming to what must have been a very thin area of good bone at the posterior wall of the frontal sinus. The soft bone was all cleared out. A drain was placed in the wound for a short time, leading to the nose. The wound was sewed up, as in the ordinary Killian operation, and the patient has made—temporarily at least—a good recovery. The operation was done three

months ago, and up to the present time there has been no recurrence, although there were two or three before that. Soft or diseased bone, or any other bad bone in the frontal sinus, should be treated just as you are in the habit of treating the same kind of bone in the mastoid or any other region.

Dr. Lewis A. Coffin, New York City: I should be much less afraid of a curette than of leaving diseased bone in a patient. As to whether the posterior wall being necrotic and perforated is an invariable sign of syphilis, I have grave doubts. I have seen this condition in comparatively few cases; one case was in a child of six years having perfectly healthy parents. In reporting that case I spoke of another that I had previously seen in which the anterior wall was so soft that I removed it with a spoon curette and stated that I did not see why the posterior wall should not be affected by the same pathologic process as the anterior wall. A case somewhat similar to the one just reported comes to mind. A young woman was riding in an automobile when the peculiar accident happened. The shaft of a wagon to which a horse was attached entered the antrum through the middle of her cheek, fracturing the floor of the orbit and the anteronasal wall. She had been under treatment for some time when I saw her. Removing a pad of gauze from her face revealed a stream of pus pouring from the open wound in her cheek. I made an incision over the eyebrow down over the ridge of the nose and the center of the skin covering the columnar cartilage and dividing the upper lip in the median line. Turning the flap well back gave a good exposure of all the diseased parts, which were thoroughly cleared out. We and our patients are fortunate in the kindly way in which incisions of the face heal. In this case there was practically no

searing except where the shaft of the wagon pierced the cheek.

Dr. George L. Riehards, Fall River, Mass.: The ability of the face to heal is very remarkable. I recall that some years ago I had a patient who was riding a bicycle down a hillside when the chain broke, and he was pitched suddenly forward in such a way that he tore off the front of the face from the nose to the chin, and in addition got all the dirt of the street into his wounds. A number of operations were necessary, but in the end a fairly good looking face resulted.

Dr. T. Passmore Berens, New York City. It seems to me that this is the same condition that we find in the mastoid of bone that is not syphilitic but is simply an unusually firm hard bone. We have to be patient, and let it heal. A number of years ago I mentioned the mild pressure that was needed in these cases, such as would come from a pinee nez with long horns pressing the nasal bones together. It seems to me that if he had exerted a slight constant pressure, such as you get from a pinee nez, he would have overcome that broadening of the nose. I merely mention this to accentuate the benefit of constant mild pressure.

Dr. Bryson Delavan, New York City: In suppurative conditions of the nasal sinuses if there should be any question of the existence of syphilis, operative work must be undertaken with caution, since under antisyphilitic treatment many cases have been cured or have satisfactorily improved without operative interference. Many cases could be quoted to prove this. It may be said, therefore, that where there is a positive Wassermann reaction wait, if possible, until a course of specific treatment has either cured the sinus disease or made the necessity for operation clear.

Dr. John R. Winslow, Baltimore,

closing: I do not want to leave anyone under the impression that I am ignorant enough to leave soft bone and close it in the wound. It was not soft, but hard as steel, and I curetted it three times as much as I thought was safe. I acted not only on my own best judgment, but also on the advice of several friends.

CARPET TACK IN THE RIGHT BRONCHIAL TUBE OF A PATIENT FOR TWO YEARS WITH NO PATHOLOGIC SYMPTOMS; EXHIBITION OF PLATES

Dunbar Roy, M. D., Atlanta

This occurred in a female aged twenty-eight years. X-Ray showed the tack in the right bronchus between the seventh and eighth ribs. Its removal was at once attempted by upper bronchoscopy and failed. Tracheotomy was performed the next day, the bronchoscope passed, but he was unable to grasp and dislodge the tack, and the tracheotomy wound allowed to heal.

Five months later a bronchoscope was easily introduced by upper bronchoscopy by Dr. R. C. Lynch. The tube was too short and the foreign body could not be removed.

The patient has been entirely well since then, now two years, increasing in weight. X-Ray photographs were shown showing the tack still in situ.

The writer presents records of a number of cases of this character, many of them without producing untoward symptoms.

DISCUSSION

Dr. T. H. Halsted, Syracuse: In connection with this case of Dr. Roy's, I should like to report the recent removal of a foreign body from the right bronchus occurring in a girl of ten years.

This child while playing, having occasion to put her pocket handkerchief to her mouth, inhaled a metal clip, shaped somewhat like a fish hook, which had been in her pocket. There was an immediate attack of dyspnea, lasting a few moments, but within a few minutes no symptoms beyond a sensation as of something sharp lodged in the throat remained. A physician saw her within ten minutes, at which time all symptoms had disappeared, beyond the pricking sensation. He assured her that she must either have expectorated or swallowed it. She had no trouble that night, but the next morning, the sticking sensation referred to the neck continuing, she consulted another physician, Dr. Swift, who had an X-Ray made. This disclosed a foreign body in the right bronchus. She was referred to me for operation. Under general anesthesia I soon located the metallic object by upper bronchoscopy and made repeated but unsuccessful efforts at removal. The X-Ray failed to tell whether the sharp point was directed up or down, and it could not be determined by direct inspection. The next morning stereoscopic plates were made, and showed the foreign body to be in the right bronchus, sharp point upward. Under ether, the trachea was opened, and under lower bronchoscopy the foreign body was, after two hours' work removed. It was in the second division of the bronchus, firmly wedged, but by manipulation it was finally removed by a long alligator forceps with but little damage to the bronchioles. It was a flexible steel clip used in clothing stores for holding cardboard price marks, shaped like a sharply bent fish hook, the shaft being three-fourths of an inch long and the pin portion half an inch. It, together with the stereoscopic plates, are presented for examination. The tracheal wound was at once closed, the

child made an uneventful recovery, leaving the hospital in eight days. It was the most difficult case of its kind I have met with.

CONCERNING ATROPHIC RHINITIS AND OZENA; WITH REPORT OF CASE REFERRED TO LAST YEAR

Lewis A. Coffin, M. D., New York City

The speaker believes he was the first to suggest that the foul odor which so frequently accompanies atrophic rhinitis and constitutes the disease known as ozena has its origin and is caused by a chronically diseased and poorly drained antrum. Since making this statement others have reported to him that they had treated several cases in this manner with the same excellent results.

In one of his cases there was no improvement whatever, although operations had been performed on both antra.

He was unable to account for the failure in this instance.

DISCUSSION

Dr. Cornelius G. Coakley: It seems to me that all the odor should not be attributed to disease of the maxillary sinus. If the patient had pansinusitis I do not see why it should be cured by washing out the maxillary and leaving the same pathologic process in the ethmoid and frontal. Of course you do not get so much odor from them, but I should think you should clear them up as well as the maxillary, and I suggest that as the cause of the continuation of the odor.

Dr. George L. Richards, Fall River: I have had good luck in using the chlorinated oil in the type of case that Dr. Coffin has been speaking of. It is

purely empirical. I used it thinking that it would do some good to place it on the surface and hold it there. It was done with the swab or spray, and not after opening the antrum. I have not been converted to the belief that all or even the majority of cases of atrophic rhinitis are due to antrum disease.

Dr. Thomas H. Halsted, Syracuse: After seeing Dr. Coffin's cases last year, I treated a case with the foulest odor I ever encountered. I did a double antrum (simple McNamee) operation on her. The odor was simply unbearable and unendurable. Nothing further was done. The saline douche that she was using was kept up. I did not see her, after she went home, for a year. Then the odor had entirely disappeared. There was no odor from the nose whatever, and no other treatment had been carried out during this time but the washing out. In three of five other cases there was absolutely complete cessation of all odor. It was one of the most satisfactory operations of any that I have done. Of three of my five cases, the odor of which was very bad, was entirely relieved by the antrum operation; in the other two it was greatly lessened. There was a marked diminution in the amount of crusts in the nose. The odor comes, I am satisfied, more from the gas from the antral secretion than from the nasal seabs, though doubtless some comes also from the other sinuses, the frontal, ethmoid and sphenoid, when they are involved, and their treatment, by ventilation through operation, will be required in such cases.

Dr. Henry L. Swain, New Haven: What did you find in the maxillary sinus,

Dr. Thomas H. Halsted, Syracuse: Nothing much; the operation was done by simply opening through the nose. I was not able to see as you would with

a Caldwell-Luc. I made a good big opening through the nose and got ventilation and prevented the retention of secretion and pus.

Dr. Swain, New Haven: Did the X-ray show anything in the antrum before operating?

Dr. Halsted, Syracuse: There was no X-ray made.

Dr. Swain, New Haven: Did the transilluminator?

Dr. Halsted, Syracuse: Yes, and I did one of these operations recently in a nurse where the transillumination was clear.

Dr. Swain, New Haven: You operated in spite of that?

Dr. Halsted, Syracuse: Yes.

Dr. Greenfield Sluder, St. Louis: The point that I should like to make is that if Dr. Coffin has established the opening of the antrum for the cure of ozena and the stench of an atrophic rhinitis, it seems to me that it is one of the greatest advances presented to us for a long time. Last year I asked the question, which was not answered, "What happens in a case of atrophic rhinitis when the olfactory fissure is eroded all around?" There is an antrum, open, but the atrophic process is as active and destructive there as elsewhere.

Dr. Henry L. Swain, New Haven: In speaking to Dr. Sluder's remarks, I was endeavoring to bring out the proposition that Dr. Coffin has brought before us, because he will be accused of saying that he cures atrophic rhinitis by opening the antrum. He does not cure the rhinitis, but does cure the odor, as Dr. Sluder says. As I said at the last meeting, it was a most radical remark on Dr. Coffin's part, and if it bore truth as promised it was really an epoch-making suggestion, and I rise to confirm Dr. Sluder.

Dr. Greenfield Sluder, St. Louis: I

forgot to state that I am going to try it when I get home

Dr. Hanau W. Loeb, St. Louis: It is obvious that if there is any process of this nature in the antrum, by securing good drainage there will naturally be improvement in the odor, just as I have found that by clearing out the ethmoids a particular odor that may accompany the process will improve or disappear. I feel that Dr. Coffin's contribution in this respect constitutes simply calling attention to the fact that the antrum being the largest cavity connected with the nose and most intimately associated with its function, the greatest opportunity for the development of these crusts is offered by it whenever it is subjected to the action of the putrefactive bacteria. I do not see why it should be affected in all the cases, or even in more than a fair number of the cases because, according to my information and observation, the antrum is not more often affected than other sinuses.

Dr. Henry L. Swain, New Haven: If the people will take enough pains to cleanse the nose properly most of them can remain inoffensive to their immediate environment. That would not be the case if the odor depended entirely on the condition of the interior of the antrum. So, although I am particularly friendly to Dr. Coffin's suggestion, I am sure that we are not going to cure all cases by opening the antrum, because all cases are not due to that. We are not saying that he does not do it, but we hope to do equally good work. In an antrum where I could see in pretty well through a large natural opening between the antrum and the nose, where there was an atrophic process in the nose, we could see in the antrum that the mucous membrane lining the antrum had the same process going on in it as in the nose. That is, there were masses of atrophic material lining the entire

cavity of the antrum. If that could exist once, it could many times, and that explains why in some of these cases in which, as Dr. Halsted discovered, where there is no darkness under trans-illumination, there will be going on the same process as in the nose, which can be relieved by opening the sinus, and only by doing so.

Dr. T. Halsted, Syracuse: In three of my cases the odor was extreme. In the other two, the odor is much relieved. It is simply remarkable what improvement has taken place. I can only say in a general way that there was a diminution in the amount of crusting. I do not believe that all the odor comes from the crusting. I believe that it will be proved that it is from the maxillary sinus as well as the ethmoid and frontal.

Dr. Greenfield Sluder, St. Louis: If the author can locate the antrum as the point from which the stench proceeds, that is the most valuable contribution that we have had for a long time.

Dr. L. A. Coffin, New York City, closing: Dr. Sluder has given a perfectly proper definition of ozena as "the odor accompanying atrophic rhinitis." Then he talks of seeing seabs about the olfactory fissure—but does not state that there is any odor or ozena from these particular seabs. We are not discussing seabs but an odor known as ozena.

Dr. Coakley asks why the antrum rather than the other sinuses? The antrum is practically the only sinus I have ever opened from which was emitted a foul odor. This occurs frequently and is due to the anatomic structure of the antrum. Drainage is at the top, while in most other sinuses drainage is from the bottom.

The ease of a young lady comes to mind. She had extreme atrophy, no inferior or middle turbinates in sight, nose much beslobbered, and when she

first came emitting a foul and stinking odor. Her antra having been opened and cleansed, the odor (ozena) has entirely disappeared, while undoubted disease of many of the other sinuses persists, as does scabbing, although not to the same degree as before the treatment of the antra.

She was one of the cases seen by Dr. Halsted. Another was a young boy about twelve years of age. Apparently he had not only marked disease of the antrum of one side but marked ethmoiditis as well—nose full of crusts and ozena. I opened and treated the antrum, purposely leaving the ethmoids untouched. The odor disappeared.

As to the value of the X-ray in diagnosis: It is a help, by no means infallible. Personally, I care little for another's reading of the negative. Now, these are the thoughts which I wish to impress and leave with you: First, that the odor of ozena comes frequently from disease of the antrum, and is relieved by the treatment of the antrum. Second, please remember that I have today reported a case not so relieved.

I trust that you will all try the treatment, as has Dr. Halsted, and that you will bear in mind that we do not expect 100 per cent perfect in 100 per cent of the cases.

THREE UNUSUAL NASAL (SPHENOPALATINE) GANGLION CASES

Greenfield Sluder, M. D., St. Louis

The usual neuralgic picture is pain in and about the eyes and the upper jaw, the teeth, extending backward about the temple under the zygoma into the ear, making earache; and then backward into the mastoid; and severest usually at a point two inches back of the mastoid, to extend into the occiput, the neck, the shoulder; into

the shoulder blade, and sometimes the axilla and breast, and frequently down into the arm, forearm, hand and even to the finger tips.

Added to this symptom complex, frequently is found a sneezing and watery secretion more marked probably in the morning, frequently extending through the day; a red external nose, with tearing eyes, photophobia, and a sense of discomfort in the eyes difficult for the patient to describe.

Occasionally, however, are added unusual features to this clinical complex. These cases record phenomena that at present are unique and cannot be explained. They may be recorded as facts.

The first case was relieved of the dizziness and the headache after cocaineization of the ganglion, the headaches returning in six hours. The patient passed from further observation.

In the second case headache ceased, but as an effect of cocaineization the right eyelid drooped very perceptibly to obscure probably half of the blepharospasm, and the pupil contracted to one-half of its fellow of the opposite side.

The third case was one of a right sided blepharospasm of great severity, and was a post-ethmoid sphenoid suppuration with polyps on the right side.

Cocaineization of the right nasal ganglion relieved the blepharospasm for a period of three hours, and injection of the same ganglion was followed by relief of the spasm for three to six hours.

Operating on the ethmoids and sphenoids did not relieve the spasm.

The left side was then operated upon without relieving the spasm, although the right eyelid opened after injection of the left ganglion.

DISCUSSION.

Dr. Emil Mayer, New York City. We are much indebted to Dr. Sluder for calling attention to these nasal ganglion cases and what may be done for them. I recall the case of a young woman whom I had successfully treated for dysmenorrhea by intranasal treatment. She came to me later, suffering with headache, and I cocaineized the nasal ganglion on the side that she had her headache. An hour afterward she telephoned to say that her headache had completely ceased. She was so rejoiced that she felt that she must let me know at once how much better she was. She remained well for some months and then had a recurrence. She came again and had an application made to the ganglion on that side, and it has remained well ever since. Though I cannot explain why we can get such wonderful results in dysmenorrhea cases by a treatment which must perforce be called empiric, some of us may at some time be able to understand and explain it. The word empiricism must apply in this instance, as in the other instance of Dr. Coffin's, where we are unable to give a true scientific reason for the things that we do. The result is there, and the patient is happy, and that is all that can be said.

Dr. Henry L. Swain, New Haven: I have tried to cocaineize the ganglion neuralgic cases, and I want to confirm the speaker in what he has observed on the question of dizziness, which I have been unable to explain any more than he has. One of the cases that I cocaineized for headache also suffered from vertigo, and it was relieved entirely during the period of her cessation from pain, which was only two or three weeks. I made another application of adrenalin and cocaine in combination, and she was relieved for so

long that she did not think it necessary to have any further treatment of that kind. That was a year ago. I have not seen her since, and do not know whether she is still well or not.

The question of why we have pain in these sinus cases is most interesting. I have had a number of cases of severe pain with disease which I thought was well and have had an X-ray picture taken to learn the exact state of things. The neuralgia has ceased in five instances immediately after taking the picture, so there must have been something in the exposure to the X-ray that broke up the nerve complex in some way and caused the pain to stop on the spot. Previously I had been treating the case without seeming relief. Immediately after taking the picture the pain stopped. This occurred in several instances in persons that I saw every day, the pain ceasing thereafter entirely. The question arises, could this fact be put to some therapeutic use, and be of some therapeutic value? Shall we expose patient with this type of neuralgia to the X-ray to cure them? That question I leave to you to answer, but I do not think that this occurrence was accidental in all five cases in which there was no sinus disease but neuralgia and in which following the X-ray exposure the pain disappeared entirely.

Dr. Greenfield Sluder, St. Louis, closing: The case that Dr. Mayer has described was, I fancy, one of those in which the ganglion lies particularly close to the surface. That sometimes happens, and such a case may be exploded into the most violent lower-half headache by an ordinary coryza. Cocaineization in that case, is curative, not palliative merely.

Dr. Swain's observation that an X-ray relieved headache is exceedingly interesting.

**REPORT OF SYPHILITIC NECROSIS
OF THE INTERMAXILLARY
PORTION OF THE SUP-
ERIOR MAXILLA**

**Lieut-Col. Charles W. Richardson, M.
C., N. A., Washington**

The history of a young man, twenty-six years of age, married, stock broker's clerk, is presented. First seen on April 16, 1917, on account of intense pain in the floor and lateral wall of the left nasal chamber. There was no swelling or inflammation, and no interference with the function of the left nasal chamber.

The patient had shortly before been operated on, or stated that he had been operated on for a mild affection of the septum, although there was no evidence of such operation having been done. The patient's condition was attended by great suffering.

After a few days, during which transillumination and X-ray examinations were made of the incisors and lateral bicuspid, as well as of the left antrum, all of which were negative, a Wassermann was made which resulted in a double positive.

As there was great tenderness over the upper incisors, patient had four of these removed. Salvarsan was given. In spite of this the intermaxillary bone separated by rapid necrosis in one mass.

The important and salient feature of this case are:

1. Severe and continuous pain without any objective signs.
2. The severe necrosis without any inflammatory swelling.
3. The complete limitation of the necrosis within distinct anatomic borders.

DISCUSSION

Dr. Henry L. Swain, New Haven: In a similar case to Dr. Richardson's, where the patient had most severe pain, after proper internal and local treatment, I removed a sequestrum fully as large as that which he has shown us. A fistulous tract led through to the floor of the nose. The entire premaxillary bone came away, but complete healing resulted.

**CYST OF THE THYROGLOSSAL
DUCT—A REPORT OF TWO
CASES.**

Otto T. Freer, M. D., Chicago

The anatomic origin of these cysts is described by the author. Two cases are reported.

Case 1.—Male, began to have difficulty in swallowing, and at the same time noticed a swelling in the region of the thyrohyoid space. When first seen, on April 19, 1915, the swelling had increased and there was an increase in the difficulty in swallowing, so that to make solid food go down he had to try twice and help with a mouthful of water.

Examination showed a normal nose, pharynx, larynx and esophagus. In the thyrohyoid space a cyst was felt seemingly lying underneath the sternohyoid muscles. It was of walnut size and could be felt to interfere with the ascent of the thyroid cartilage to the hyoid bone when the patient swallowed—that is, the cyst became pinched between the two structures.

Operation on June 17, 1915. After dissecting off the superficial fascia and playisma muscle from a vertical median incision, a strong, tendinous layer of fascia was exposed that was attached to the lower border of the hyoid bone above and to the border of

the thyroid notch below, so firmly binding down the cyst between itself in front, the median thyrohyoid ligament behind and the thyrohyoid membrane laterally, the cyst being unable to escape from the compartment in which it was confined when pinched during swallowing. When exposed by removing the fascia described, the wall of the semitransparent cyst was found to be so frail that it could not be seized lest it tear. This made the dissection tedious, as only the tissue surrounding the cyst could be held with tissue forceps, the cyst being held aside with dull retractors. The cyst was removed unhurt from its bed and was found to end above in a fibrous pedicle that lay against the posterior surface of the body of the hyoid bone and could be followed as high up as its superior border at the level of the hyoepiglottic ligament. Removal of the cyst exposed the median thyrohyoid ligament to view, this ligament forming the posterior wall of the compartment in which the cyst had been confined.

Microscopic section of a part of the cyst wall showed it to be composed of fibrous tissue lined with a layer of leucocytes intermingled with numerous, evenly distributed giant cells. There was no epithelium. The cyst contained a clear fluid. The removal of the cyst enabled the patient to swallow normally.

Case 2—The second patient was a woman of thirty-two years, first seen on November 8, 1916. She had a swelling over the larynx since her tenth year. Iodin was injected into this swelling during the summer, and since this was done the swelling had gradually increased in size.

Examination showed a spindle shaped cystic tumor of the size of a walnut in the prelaryngeal region. The upper pole of the cyst could be felt to dive

under the center of the body of the hyoid bone; its lower pole dwindled to a cord that could be felt to reach the region of the thyroid isthmus.

Operation under cocaine on November 17, 1916. It took two hours to dissect out the cyst, as only the most delicate handling could prevent its rupture, and inflammatory changes caused by the iodin injection had made the cyst wall grow to its surroundings, so that the thyrohyoid and sternohyoid muscles were firmly joined to it in front. The upper end of the cyst ended in a cord that extended upward under the body of the hyoid bone to its upper border, where it was lost in the hyoepiglottic ligament. Below, the cyst ended in a similar cord that joined the isthmus of the thyroid gland. When freed from its bed, just before removal the cyst ruptured, thick pus escaping, a cold abscess probably caused by the iodin injection.

After the cyst was taken away, the thyroid and cricoid cartilages, upon which it had lain, were bared to view.

In the first case the possibility of the cyst being one derived from a subhyoid bursa might come into question. However, the pedicle which formed a cord passing up under the body of the hyoid bone in the location of the thyroglossal duct, showed the thyroid origin of the cyst.

In the second case the entire thyroglossal duct, expanded to a cyst in its middle, was present to prove the correctness of the diagnosis.

REPORT OF A CASE OF LARGE OSTEOMA INVOLVING THE RIGHT FRONTAL SINUS AND UNCOVERING THE ADJA- CENT BRAIN.

John F. Barnhill, M. D., Indianapolis

This occurred in a girl of sixteen years who first noticed a swelling on

her forehead a year previously, which caused no symptoms, but was increasing slowly in size. The speaker was consulted because of deformity.

X-ray plates showed an oval tumor involving the right frontal sinus, with absorption of the external and internal plates of the sinus walls.

Operated August 21, 1917. An area of half an inch in circumference was wanting in the frontal wall of the sinus, and through this the hard glistening tumor presented.

The remaining portion of the frontal wall was removed by rongeur and the tumor forcibly pried out by stout bone rasps. It was attached to and extended into the infundibulum. The dura was exposed and absorbed over a large area. Some softened bone about the margin of the dehiscence was rongeured away, a light sprinkle of iodoform powder applied to the exposed dura and brain. The infundibulum was enlarged by means of a bone rasp, a drain tube inserted, the cavity was lightly packed with sterile gauze and the external wound completely closed.

Recovery with but slight scar was entirely uneventful.

The tumor was an osteoma, weight a little more than six hundred grains, with great density.

DISCUSSION

Dr. John M. Ingersoll, Cleveland: At the meeting last year I showed some radiographs of an osteoma of the frontal sinus in a boy fourteen years old, following a blow from a baseball. He has been under observation for three years. During the first year after the operation I was very hopeful, but the radiographs that I exhibited last year showed a recurrence and that the osteoma had grown back into the brain cavity so far that it was inoper-

able. The tumor grew originally from the infundibulum into the frontal sinus, just as it did in Dr. Barnhill's case. The general opinion is that the tendency of these growths to recur is very marked.

We have now under observation, at Lakeside Hospital, a man who has an exophthalmos, one eye being pushed downward and forward by an osteoma growing from the external part of the orbit. The X-ray taken two months ago, compared with one taken recently, shows that the osteoma is slowly increasing, but with the known tendency of these growths to recur rapidly, we have hesitated to operate.

Dr. John E. Mackenty, New York City: In the service at the Manhattan Hospital, in another department, I was interested in an osteoma of the frontal bone. It involved the frontal sinus and extended back along the base of the brain, going through to the dura. The condition is pretty well recognized under the name of ivory osteoma of the frontal bone, and it is rather serious to operate on it. This man's was due to syphilis. He had evidence of syphilis at the time. I should like to ask Dr. Barnhill whether this girl's blood was examined for syphilis. The man subsequently died of meningitis. His tumor was not operable. The consensus of opinion is that when these tumors are very large, they are inoperable because the difficulty of getting them out entirely is so great.

Dr. John F. Barnhill, closing: She was an only child. There was no evidence of hereditary syphilis, and I looked on her as a perfectly well girl except for this ivory-hard tumor. I should be greatly amazed if this should turn out to be a sarcoma. I am well aware that sarcoma is more common in this region than anything like one. I should be greatly astonished if it returned. When I pried it off it snapped

from the infundibular attachments with a crack such as would a piece of marble, and in sawing through it was so ivory like that it could be compared to a billiard ball. There was no suspicion on the part of anyone that it could be sarcoma, but I know the tricks of sarcoma so well that I would not say that it is impossible for it to have been one.

REPORT OF A CASE OF PROLONGED INTUBATION

Emil Mayer, M. D., New York City

A boy aged nine years had had diphtheria at the age of two, for which tracheotomy was done, resulting in a tracheal fistula, for which he was admitted to the hospital. Attempts to close by this plastic operation failed, with the result that a tracheotomy tube had to be inserted.

Stenosis of the larynx followed, which was treated by divulsion, with subsequent introduction of an intubation tube. This tube had to be removed under suspension and promptly reinserted at intervals for a period of five years, always under general anesthesia. Finally in April, 1918, the intubation tube was removed. A tracheotomy tube was inserted for a couple of days. This was removed, the wound closed, the patient breathing since through the natural passages. The writer concludes:

The special points of interest in this case are.

1. Persistent remaining of a tracheal fistula in spite of every faithful attempt at its closure.
2. A stenosis of the lower portion of the larynx due to contraction of the natural parts, and their consequent disuse.
3. The impossibility of intubating

except under general anesthesia and under suspension.

4. Persistent collapse of the larynx as soon as extubated.

5. The prolonged wearing for five years of an intubation tube.

6. The ability to breathe through the natural passages after all these years, in spite of the loss of at least two anterior rings of the trachea.

To this happy outcome must be attributed, in great extent, the growth of the patient, who, from a little boy of nine, and four feet in height, is now nearly fifteen years old, and has attained a height of five feet five inches, with natural increase in size of all his organs, including the trachea and larynx.

DISCUSSION

Dr. Henry L. Swain, New Haven: I should like to inquire as to the development of thyroid and cricoid cartilage, notwithstanding their disuse—do they grow in the normal way?

Answer: Yes.

Dr. Joseph H. Bryan, Washington: It must have taken long continued, patient work.

Dr. Thomas H. Halsted, Syracuse: I hoped that Dr. Mayer would help me out on a case that is at present under my care. Three months ago I was called to see a child a year old which had had a mild laryngitis for several days. A general physician was in charge of the case. One night the dyspnea became worse, and I was called in. I found the child cyanosed and the dyspnea very great. Examination revealed nothing. I had the child sent to the hospital, and went there myself in my car, after telephoning for them to have the instruments ready for immediate intubation. The tube was put in immediately and a culture was made and found negative. Antitoxin was

given on general principles. At the end of six days I removed the tube, but had to put it back immediately and make artificial respiration. We gave this child antitoxin during the first few days. The throat was examined repeatedly, but the culture was always negative. It has been three months now, and during this time I have extubated eight times and intubated nine times. I did a direct laryngoscopy a month ago, and found nothing but an ashy appearance of the trachea, resembling a pseudomembrane. I did not do a bronchoscopy. We suspected the existence of a foreign body, and the child has been X-rayed several times, always without result. The child is perfectly well otherwise, and has gained in weight. It walks about and enjoys itself, and has no difficulty in swallowing, but I do not know how to get rid of the tube. The grandmother wants me to say that she believes that it was all due to teething. I do not know. The child has had one very slowly erupting tooth, one of the molars. It has been exceedingly painful. It has taken that tooth, which looked as if it were ready to erupt when the thing happened, until now to come through, and in the meanwhile a number of other teeth have erupted.

Dr. Charles W. Richardson, Washington: The case of Dr. Mayer's is a very interesting one. In former days, when I did a great many intubations, I occasionally met with some prolonged retention of the tube, but I think Dr. Mayer has the record for long retention of the tube, and I wish to congratulate him on surmounting his various difficulties, especially after the loss of part of the cartilage.

May I ask whether he does not think that there was some regeneration of the cartilage later on, which caused the box of the larynx to stiffen up so

that its firmness made it possible for him to eventually take out the tube and dispense with it entirely? That seems to me to have occurred in this case.

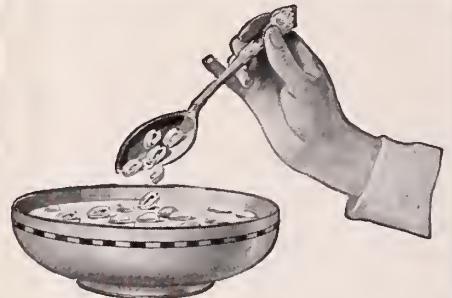
Regarding Dr. Halsted's case: Some few years ago I reported a series of cases of laryngitis hypertrophica subglottica acuta, and I should judge from what he describes that it was a case absolutely of the same character. Such is the usual history of these cases, as he describes and as I have seen them. They are usually very intractable with regard to the removal of the tube. They have in the past given me more trouble than the fewer retained tubes in diphtheritic cases, as you would naturally expect on account of the fact that the urinary trouble in these cases is subglottic in the cricoid region. Of course, when I took out the tube in these retained cases the tenosis immediately recurred or soon thereafter. It takes some time to get rid of the tube. I should not worry about it, but keep on in the same way he is now following. I have had cases last three or four months before eventually being able to dispense with the tube.

Dr. Henry L. Swain, New Haven: I presume that Dr. Halsted adopted the method of giving large doses of an antispasmodic before attempting to take the tube out. That is often successful. You can then remove it, when you would not be able to do so if the child was in possession of all his reflexes. I have had exactly the same kind of a case as Dr. Halsted. In fact, there are three in the hospital now. One is just like this, and the others are retained tube cases. I have had trouble to get rid of them. I am sorry that I forgot Dr. Richardson's suggestion, and I think that this explains the situation perfectly. However, I did try to look upward in one of the cases. I was called in consultation and

thought that it would be a good thing to do a tracheotomy and take the tube out. At the time of the operation and later. I tried to look in from below and see the condition of the larynx and find out what its interior contained, but without success. Some time after the tracheotomy this child had a sudden choking fit and died. We could not explain the matter, unless it was general uremia. The other children got well, but in these we had almost to stupefy the patient before we could get the tube out and have it stay out. In one case we had to keep the child under the narcotic for a whole twenty-four hours. These two children are all right now.

Dr. Emil Mayer, New York City, closing: Replying to Dr. Richardson's question, I would say that perhaps there was not so much reformation of cartilage, but that on account of the long continued presence of the tube all the tissues about the trachea became as hard as whalebones. So we had almost bony ridges on each side, which served to prevent the collapse that surely would have occurred from the falling in of the soft parts.

Regarding the case that the chairman presented, it does seem that an acute laryngotracheitis of some kind was the original cause requiring intubation. Dr. Lynah, in a masterly paper on "Prolonged Wearing of Intubation Tubes," recently called attention to the immediate collapse that takes place in many instances when the tube has been removed, requiring a hasty reintubation. In fact, he tells of a case in a boy who was extubated and returned to the ward. The boy was under the impression that the tube was still in situ. He was kept in the hospital for some time, and every time he misbehaved they threatened to remove the tube and he immediately behaved. The tube was not there, but he thought



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it was. I would suggest to Dr. Halsted to introduce a much larger intubation tube next time, and when he does extubate to have the patient under some opiate, so that the general reflexes would cease, watching over him for that time of immediate danger and the likelihood of having to do a tracheotomy.

Regarding the question of Dr. Swain, as to whether the patient did not receive quantities of antispasmodics, I would say that the boy was never extubated except under general anesthesia. He has been receiving an eighth of a grain of morphia, and then being completely anesthetized while the tube was removed for cleansing, and this latter had to be done in a hurry. He has been anesthetized over twenty-five times, and each time the anesthesia became more difficult because he was pretty well soaked with the drug. I hope that we shall not have to do any more for the little chap because he has been very brave. It certainly was to me a most interesting case, and one of the most important deductions that we can make is the wonderful tolerance of the larynx. The keeping of a tube in a larynx for a month's time seems to make no difference to him.



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EDITORIAL

WHISKEY IN INFLUENZA AND PNEUMONIA

We copy from The Columbia State of November 2nd and 4th interesting replies to a circular letter as follows:

A wide and striking diversity of opinion as to the wisdom of using whiskey in the treatment of influenza and pneumonia cases is revealed in replies of physicians to a circular letter sent out a few days ago by The State.

When the influenza epidemic gripped the State from the mountains to the coast and when pneumonia began to reap its fearful toll of valuable lives, there developed a demand for whiskey for the treatment of desperate cases, and so insistent did the demand become, and so urgent was the need for some remedy that would check the pro-

gress of the dread disease, that liquor, which had been seized by State and federal authorities, was turned over to the State health officer and to the chairman of the local chapter of the American Red Cross for distribution to patients who held doctor's prescriptions calling for whiskey.

At once objections to the use of whiskey began to be voiced, and the medical fraternity itself as well as intelligent laymen divided into two camps, one holding that whiskey was a good stimulant to administer in certain cases, the other protesting vigorously that there was no good in it.

Surgeon General Blue

Dr. C. V. Akin, of the United States public health service wired Surgeon General Rupert Blue, of the public

health service, as follows: "Am requested by editors of leading newspapers of South Carolina for statement regarding the use of whiskey in treatment of influenza-pneumonia cases. In order that opinion be authoritative, will the bureau wire me opinion for publication. Have overcome considerable local hysteria over liquor, but recommend that plain statement be made as divergence of professional opinion leads to uncertainty and lay unrest."

Surgeon General Blue responded promptly as follows: "In (public health) service, the opinion is that the thereapeutic value of whiskey or any other alcoholic for treatment of pneumonia doubtful. The service does not encourage or recommend its use."

In order to get definite expressions of opinions from physicians in Columbia a circular letter as prepared and sent to about fifty physicians in the city. In the letter, the following questions were asked:

- (1) "Do you ever prescribe whiskey in the treatment of pneumonia?"
- (2) "Do you consider it essential in the treatment of this disease?"
- (3) "To what extent would you advise its use in the treatment of pneumonia?"

Below are given the answers of those physicians who have replied, the answers being numbered to correspond to the questions asked:

Dr. Clarence E. Owens

(1) Yes, used whiskey in about 50 cases of pneumonia during the last three weeks.

(2) I certainly do.

(3) Usually one-half ounce every three hours until patient is out of danger. I am positively certain that whiskey is essential in the treatment of pneumonia.

Dr. William C. Abel

- (1) No.
- (2) No.
- (3) Not at all.

Dr. F. W. P. Butler

- (1) Yes, for thirty-five years.
- (2) When an active defensive stimulant is needed it is indispensable in my opinion.
- (3) In medical doses through the entire course of the trouble and should be furnished by the Government. The people who drove this medicine out of the country know nothing of the effects of it. Coca cola is more injurious than a moderate use of whiskey. I think we should have prohibition on it now and coffee kills more people than whiskey ever did. When a country legislates, attempting to regulate the senses and appetites, I think it a piece of fanaticism. The late revolution on the liquor question will only cause the reaction to be more radical than ever, and we most likely will drift into a much worse condition of affairs.

Dr. J. Heyward Gibbes

- (1) No.
- (2) No.
- (3) Not at all.

In my opinion the use of alcohol in pneumonia is clearly contra indicated because of the dilation of the small blood vessels that is caused by this drug, adding burdens to the circulatory system.

Dr. E. M. Whaley

- (1) No.
- (2) No.
- (3) Not at all.

A small dose before midday meal as an appetizer after pneumonia is well.

Dr. Jane Bruce Guignard

- (1) No.
- (2) No.
- (3) None.

I deplore the present effort to get whiskey into use of public and deplore the publicity given to what I think such mistakeness.

Dr. W. M. Lester

- (1) Yes.
- (2) As much so as any other drug.
- (3) In any stage when a stimulant is indicated.

I do not use whiskey as a routine treatment in pneumonia but in certain individuals and in certain conditions of the disease. I consider it the best stimulant to give.

Dr. N. B. Heyward

- (1) Very, very seldom.
- (2) No.
- (3) Only in the very toxic and delirious cases and even then it has a very doubtful value. Alcohol is a narcotic and not a stimulant.

Dr. James H. McIntosh

- (1) Yes. Frequently.
- (2) Just as essential as any drug.
- (3) Some cases need it; some do not. The symptoms in the individual case must decide the question in each case. It is even more useful in the treatment of the sequelae of influenza or grippe than it is in pneumonia.

Dr. D. S. Black

- (1) Yes, in selected cases.
- (2) As essential as morphine.
- (3) Governed entirely by the case.

While whiskey may not be essential, it and morphine both add to the comfort of the patient. Making a patient comfortable makes the progress of the case more favorable.

Dr. R. A. Lancaster

- (1) Mainly to flavor with for convalescents.
- (2) No.
- (3) As placebo and for subnormal temperature of convalescents.

Can imagine cases when it might be useful if skillfully used, but indiscriminate use would do more harm than good. The same can be said of aconite and veratrum viride.

Dr. Geo. W. Bunch

- (1) Only in alcoholics.
- (2) Only in alcoholics.
- (3) Only in chronic alcoholics.

No matter what the disease, I believe whiskey is only useful to those who have been habitual drinkers. Such people are dependent upon it in any serious illness.

Dr. J. J. Watson

- (1) Yes.
- (2) Occasionally.
- (3) Pro re nata.

Where symptoms of severe toxemia are present i. e., delirium, dry tongue, rapid pulse and distended abdomen, no remedial agent can take its place. It is not needed in every case of pneumonia, any more than morphine is needed for every pain, but when it is needed nothing else can take its place.

Dr. R. T. Jennings

- (1) No.
- (2) No.
- (3) Not at all.

Dr. A. E. Boozer

- (1) No.
- (2) No.
- (3) Not at all.

Dr. L. B. Owens

- (1) Have prescribed it, but failed to see any benefit from it.

(2) I do not.
 (3) Not at all.

It is like morphine for acute appendicitis, it fools the patient and his friends. In pneumonia the patient dies from the want of oxygen and from the extreme toxic condition. Whiskey does not increase the oxygen or eliminate the toxins.

Dr. A. B. Johnson

(1) Yes.
 (2) Yes, very much so.
 (3) Only during stages of consolidation. I consider that whiskey has saved at least a patient of mine of pneumonia in the last two weeks.

Dr. Friend Simpson

(1) In the past, yes; am not now in great practice.
 (2) No.
 (3) Not required.

Dr. Oscar LaBorde

(1) Yes. When indicated.
 (2) Yes. In some cases.
 (3) I use it whenever a stimulant is indicated. I do not use it in all cases but in toxic or delirium cases with a weak pulse whiskey is certainly indicated and does good.

Dr. W. A. Boyd

(1) Yes.
 (2) Yes.
 (3) As conditions demanded.

ORIGINAL ARTICLES

THE MILK TREATMENT IN THE CARE OF CERTAIN CHRONIC DISEASES

By Sophia Brunson, M. D., Sumter, S. C.

I do not lay claim to any great originality in the preparation of this paper on "The Milk Treatment in the Care of Certain Chronic Diseases"; on the contrary, I have gained considerable help from a work by Dr. Charles S. Porter, who conducts a Sanitarium in California, where patients are treated exclusively on the milk diet. Personally I have had some experience which has caused me to think very highly of the milk diet, as a Therapeutic agent of great value.

Through no fault nor desire of my own my husband being a minister, I have frequently changed my location since beginning the practice of medicine in 1903, and I have found to my sorrow, that the new Physician is always sought out by the chronics and incurables of a community, who hope to be conducted by him to the fabled fountain of youth and healing, for which they have vainly sought for so long. Hence the resources and skill of the unfortunate new comer are taxed to the utmost, in seeking to help these despairing, yet very trying delinquents of humanity.

I have found that the taking of milk in proper quantities and under suitable conditions has proved to be for some of these sick folks the veritable fountain for which Ponce de Leon sought in vain so long ago.

Now let us look for a moment at the

composition of milk. It is composed of Water 87. parts, Fat 3-50, Sugar, 5.00, Casein 3.00, Albumen, 50 Salts, 75.

The gastric juice of the stomach besides containing hydrochloric acid, also has two enzymes, pepsin and rennin. About 98 per cent of dyspeptics have an excess of hydrochloric acid in the stomach.

In the digestion of milk, the rennin and acid separates the curds from the whey. Now the fatty globules are enclosed with the clots of casein, while the whey containing the sugar, albumen and salts are very soon taken up by the blood and absorbed into the system. The digestion of the curd is carried on by the pepsin, and after passing out of the stomach, by the trypsin, a digestive ferment from the pancreas which operates only in an alkaline media. A very important point to be kept in mind is, that a small amount of milk combined with a large amount of rennin will produce a firm, tough clot, which may remain in the stomach for hours and cause nausea and vomiting, while a large quantity of milk mixed with the same amount of rennin will produce a soft, easily digested curd. Every cheese maker knows that he must use a large quantity of milk with very little rennin to produce soft, friable cheese. Remember that in prescribing small quantities of milk you are apt to find the patient complaining of indigestion and constipation. If this is the case, do not conclude that your patient cannot digest milk, for the method of administering it may be the cause of the whole trouble.

Three hundred years ago, Lord Bacon said, "Many persons declare that they cannot take milk as food, and the reason is that they do not take enough." Dr. Loveland of New York

in an article on the Milk diet says: "It also happens that when a small quantity of milk disagrees, a large quantity will often agree."

In Gould's Dictionary of Medicine, he defines the milk cure as "The method of treating certain diseases by an exclusive diet of skim-milk. " He goes on to say that, "It is of service in dropsies of all kinds, obstinate intestinal neuralgias, incorrigible dyspepsias with great disturbance of nutrition, hepatic disorders, asthma due to pulmonary catarrh and emphysema, hysterical and hypochondriac states associated with serious disturbances of nutrition, and in disorders of nutrition dependent on chronic catarrh of the stomach and intestines. My experience has not been however, with skim-milk, but with whole milk. Nearly all chronic diseases would be benefitted by the milk diet if properly administered.

There are various methods of taking the milk treatment, but the best results can be obtained if the patient goes to bed and remains at rest during the cure. The modus-operandi is as follows:

The patient in order to begin absorbing the milk without distress, as a rule, should fast from thirty-six to forty-eight hours before commencing the diet. If the rest cure is to be taken at the same time, it is always advisable to have the patient go to bed on a quiet sleeping porch, if possible. If this is out of the question, the room should have several windows in it, which remain open day and night. If the patient cannot afford an attendant, then he must have a clock within sight, and at table besides the bed containing his glass, which must be plainly marked with the amount of milk which he is to take at a draught. He should have a light weight, covered

receptacle to contain his milk. The toilet and bath room must be within easy reach, or else substitutes for them must be provided. A daily warm bath should be taken. It is best for the patient to enter the tub with the water a little below the temperature of the body and then gradually turn in hot water until it reaches body temperature or is quite comfortable. The time is increased fifteen minutes each day until the patient remains in the water one hour. Keep the temperature at 98 degrees F. or 99 degrees F. until just before the patient gets out of the tub when it should be raised by adding hot water until the patient is quite warm. Do not finish with cold water.

Now, as to the milk. That obtained from Holstein cows with only 3-5 per cent butter fat is more easily digested than Jersey milk with 5 per cent or more. Some people cannot take whole milk, so it is necessary to give them separated milk or even skim-milk, while excellent results can be obtained in this way, yet the gain in weight will be much less.

In regard to the amount of milk to be taken, it is necessary to take into consideration the weight and height of the patient. The average individual will require six quarts of milk a day, containing from 3 1-2 to 4 per cent butter fat and 9 per cent of solids. The males usually exceed that amount and small women often take less. The diet should never be undertaken on too small an amount of milk. Enough should be taken to stimulate the circulation and produce body growth. The patient should begin with the full amount of milk. If six quarts is the daily amount, use a glass which is marked to contain six ounces, or if seven quarts are to be taken, then a drink will contain 7 ounces, to be

drunk every half hour. There will be about thirty-two drinks in the 24 hours. If the patient receives the first drink at six A. M. and none are missed, by 8:30 P. M. thirty drinks will have been taken, leaving two to be drunk during the night, when the patient happens to be awake.

The milk must be sipped very slowly, and thoroughly mixed with the saliva. The temperature of the milk should be about 60 degrees F. or about room temperature, unless there is distress in the stomach and indigestion, in which case the patient should be put upon warm, but not boiled milk. In discussing the milk diet with a physician not long ago, he remarked that a weak person could not digest and assimilate so much milk. He was mistaken, for I have tried it and know that the milk is absorbed and digested with great benefit to the patient.

Among the diseases that are treated successfully by the milk diet, are gastric and intestinal ulcers, enteropatosis, dyspepsia, chronic diarrhoea and constipation. In fact, there are very few chronic diseases that would not show improvement if treated in this way.

The average patient should take the cure for at least four weeks. During this time, he does not need massage nor exercise. His energy is taken up in digesting and assimilating the milk, putting in flesh and in restoring diseased tissues. He usually sleeps a great deal and stores up energy for days to come.

After beginning the treatment, the action of the heart is greatly accelerated, and within 12 to 24 hours, there will be a gain of six beats to the minute, and within two or three days there will be an increase of twelve beats to the minute. The pulse is full and bounding, the skin flushed and moist,

the capillary circulation quick and active. This natural physiological acceleration of circulation is the result of the increased amount of blood. There is no dangerous strain on the heart, because this again derives great benefit from the new and richer blood circulating through it. The kidneys share in the benefit and rapidly create new healthy cells which replace the old outworn ones. The amount of urine is naturally greatly increased, at first large quantities of acids, urea and salts are eliminated, and then it becomes bland, non-irritating and clear. Every cell and tissue in the body is now bathed in new life giving blood, and the unbalanced mechanism of nutrition begins to adjust itself. Though the action of the heart is increased at first, as the organ grows stronger, there are fewer pulsations, though the pulse is full. Every organ in the body is hyperemic. Remember that in order to rebuild or regenerate any portion of the body the blood must be in excess of the ordinary tissue nourishing quantity. Anæmia is most successfully treated by the milk diet. There is no medicine in the Pharmacopœia that will build red blood so quickly and so surely as milk.

Patients as a rule put on flesh very rapidly when taking the milk diet. It is also observed that the muscles become as firm and hard as though the patient had been taking exercise. This is due to the large amount of blood that is constantly kept pumping through the tissues. Now the alimentary canal, oesophagus, stomach and intestines contain in their wall a double layer of involuntary fibers, part of them encircling the organs and the remainder running lengthwise. These muscles acting in conjunction carry on digestion and produce peristaltic action. In many cases these muscles are too

thin and weak to perform their functions normally. We have every evidence that these organs increase in size and efficiency with great rapidity when taking the milk diet. Patients who could scarcely eat any food at all without it's being followed by painful and distressing consequences, are able to digest from six to seven quarts of milk in the twenty-four hours. They also find when on resuming their usual diet that they can not only digest it, but can also add many articles to their dietary that formerly they did not dare to touch.

I will cite a typical case to whom I administered the milk diet several months ago. The lady was about 47 years old and had been an invalid for a great many years. She had been operated on twice, and had had a complete hysterectomy and appendectomy. She had spent varying periods of time at Sanitariums without deriving much benefit. When I saw her, she said that for months she had spent a large part of her time upon the bed. I had several X Ray pictures made and also examined the patient through the Fleuroscope. There was general enteroptosis of the abdominal contents. The colon was in a spastic condition; parts of it were greatly dilated and distended with gas. The transverse colon was extremely prolapsed. This patient suffered from constant pains in the abdomen, especially after eating. She complained of frequent water stools, sometimes three or four a day. She said that there was always mucous and something resembling coffee grounds in them. She was intensely nervous and suffered from insomnia. I finally decided to put her on the milk treatment. I did not require her to fast as she was so weak. She was located on a sleeping porch with a comfortable room adjoining, to which

she could retire. A capable nurse was in attendance. This lady began drinking six quarts of milk a day. Towards evening she complained some of gas for the first few days. Once or twice she was nauseated and vomited, but continued drinking the milk. On several occasions she complained of pains from the accumulation of gas, especially in her right side. The pain always centered around the ilio-cecal valve in exactly the same spot where she suffered most from the pain before she began the treatment. It is quite probable that there were adhesions there, which were the result of the appendix operation. Though it is claimed, and is quite probable that the milk diet breaks up many adhesions. Then too the ilio-cecal valve was incompetent, and allowed the gas to pass back into the small intestine where it sometimes accumulated and gave rise to discomfort. No medicines were administered. At first I ordered asafoedita enemas to relieve the condition, but I found that by giving a pint or two more of milk a day, seven ounces per drink, instead of six, that the gas would pass off and the patient get along better. During the first two weeks the stools continued to be liquid. They were very frequent and the odor was most offensive. Gradually they changed to semi-solid, and later on, the consistency became normal with two large defacations daily. This patient slept a great deal of the time. She was not allowed to see many visitors and was kept very quiet. During the coldest weather she remained on the porch day and night. Of course, when necessary, the nurse applied hot water bottles. She said that she did not get cold, though she had no more covering than if she had been indoors. This was due to the increased amount of blood that was circulating through her

system, and to the improvement in the circulation. She frequently remarked that her brain was clearing and that she could think better. Sometimes she would say, "I must have been starving and did not know it, before I began the treatment."

The following table shows the rapid improvement in this patient's condition:

When she began the treatment she weighed 90 lbs. Her height without shoes is 5 ft. 5 in. The pulse was 100, and very weak. I took the blood pressure, but neglected to make a note of it, though I remember that it was below normal. The temperature was sub-normal. The patient gained four pounds the first week. The gain was quite steady. All of the body measurements increased. For example, on November 6, at the time the treatment was begun, the abdomen was 30 inches; on January 2nd, the measurement was 36 inches. The pulse in a month had become strong and full and dropped to 80 beats per minute. The temperature had also come up to normal. The weight in two months went to 118, a gain of 28 lbs.

The patient remained on the milk for eight weeks, when she returned to solid food and began taking physical culture. She has never complained of pain nor indigestion since giving up the milk. She has retained every thing that she has gained. Her strength has gradually increased. Her stools are normal as to amount and consistency.

Now in treating all chronic cases we must take into account their mental condition. After a person has suffered physically for several months, or years, as a rule he becomes a neurasthenic. His mind is continually turned inwards upon his sufferings, and he looks at life through the mental clouds with which disease has distorted his vision.

It is almost useless to treat his body without ministering to his diseased mind, and well,—there is where the rub comes—to get these patients to change their mental attitude towards life. But I am digressing. We have said that constipation could be cured by giving enough milk, but how about diarrhoea? In the ease that I have just mentioned, I gave the usual amount and the diarrhoea was corrected, but sometimes it is necessary to lessen the quantity of milk; in fact it should be restricted to the amount that would give them one or two solid stools a day.

Old people are much benefitted by the milk treatment, and it is also especially indicated in hardening of the arteries.

I had a patient not long since to whom it seemed necessary to give the milk diet, but excessive nausea and vomiting began, and the patient declared that she could not take it. I had her to stop the milk and fast for 48 hours. She had no trouble when she began again, until the third day when she commenced vomiting again. I let her have some acid fruit, after which she had no more trouble. She gained 18 lbs. during the month, and her aches and pains also disappeared.

From my experience and observations, I say that I believe that the milk diet is safe in nearly every case and often gives most gratifying results when other means have failed.

TUBERCULOSIS OF THE KIDNEY

By S. Wm. Shchapira, Major, M. C.

The causes of Tuberculosis of the kidney are predisposing and exciting. Predisposing causes, general or local,

which weaken the resistance of the kidney must be present before a kidney can be infected; a healthy kidney is not affected by germs passing through it.

General predisposing causes: All general conditions which exhaust the body, or an inherited predisposition.

Local predisposing causes: Anything which irritates the kidney, as concentrated urine, elimination of drugs through the urine which irritate the kidney or of germs that are excessive in number or in virulence: passive congestion of the kidney secondary to organic disease to prolapse of the kidney, a stasis of urine in the renal pelvis, to irritation of a calculus or to traumatism.

Direct cause: The direct cause is infection by the tubercle bacillus.

Age: It is most common between twenty and forty years but occurs at other ages. Acute miliary tuberculosis, in which the kidneys are also involved, is almost limited to children.

Sex: It occurs in both sexes, authorities disagree in which sex it is most common.

Primary tuberculosis of the kidney is rare. At autopsy, tuberculosis limited to the kidney is practically never found: still, as the kidney eliminates tubercle bacilli which enter the body one way or another, it is likely that a weakened kidney may be primarily infected.

Routes of infection: The conceivable routes are,

(a) Hematogenous—through the blood.

(b) Ascending (urogenous) through the bladder and ureter.

(c) Through the lymphatics.

(d) Contiguous—by extension from a neighboring focus.

Infection through the lymphatics or by extension from a neighboring focus

is rare. Ascending infection can occur where the ureter is dilated by a column of urine that is retained above an hypertrophied prostate, etc. As a rule, the infection is hematogenous.

Frequently of bilateral involvement: When the patients are first seen, about 10% show bilateral involvement: by the time they come to operation, 25% to 50% have both kidneys affected and at autopsy on those who died of renal tuberculosis or from the shock of the operation, 62.3% show bilateral involvement.

Suppuration in a tubercular kidney is caused by secondary infection with the staphylococcus aureus, the bacillus coli or the streptococcus, the tubercle bacillus alone usually causing caseation.

Types of renal tuberculosis:

(1) Miliary tuberculosis of the kidney occurs as part of a general miliary tuberculosis. The symptoms are those of the general disease whether that is of the typhoid, pulmonary or cerebral type.

(2) Surgical tubercular kidney is unaccompanied by severe general tuberculosis. It is classified according to the location of the lesion into (a) parenchymatous, (b) papillary, (c) pelvic types.

(3) Toxic tubercular nephritis due to irritation by the toxins during their elimination, occurs as acute diffuse, parenchymatous, interstitial or lardaceous inflammation.

A fibrous tubercular nephritis with the formation of giant cells but without any caseation is found in rare instances.

Pathology: (a) The parenchymatous type of surgical renal tuberculosis is the most common. The process usually begins at either pole. The characteristic miliary tubercles coalesce and caseate. Ulceration results from

mixed infection; encapsulation with perhaps calcification may occur. The tubercular nodules in time open into the renal pelvis forming deep tubercular ulceration, and the bacilli liberated from the caseating mass, may infect the neighboring part of the pelvis, or they may infect the ureter and bladder directly as they are passed out in the urine. Sometimes the tubercular nodule ulcerates through the kidney capsule into the perinephric fat and form a tubercular perinephritic abscess.

(b) Papillary form: this is rare. The original focus is on the tip of a renal papilla; it ulcerates readily.

(c) Pelvic form: The first focus appears as a patch of infiltration on the pelvic wall. As a rule, the pelvis is affected in the later stages of the disease, by extension of the process from the parenchyma. The walls become thickened and ulcerated. Sclerosis, with contraction of the tissues about the pelvis may give rise to retention of urine and dilatation of the pelvis. Such a process about one or more calices may shut off that part of the kidney and form a partial pyonephrosis or hydronephrosis.

Secondary changes: In the parenchyma: We sometimes find the toxic nephritis mentioned above.

In the interstitial tissue: The fibrous tissue encapsulating the tubercular nodule may extend and form an interstitial nephritis.

In the perinephric tissue: Irritation tubercles under the kidney capsule causes condensation of the perirenal fatty capsule. Contraction of the fibrous tissue resulting from the irritation may obliterate the orifice of the pelvis. The infection may spread through the fibrous capsule without perforating it and cause a suppurative perinephritis.

Secondary adventitious infection by pyogenic germs usually develops early.

The amount of pathological change varies from a single tubercle to total destruction of the kidney and depends on the virulence of the process, and amount of obstruction to the flow of urine, the rapidity of the formation of such obstruction and the presence or absence of a mixed infection: The more severe these conditions the greater the destruction.

Tubercular Infection of the Ureter.

Pathological changes: Tubercular infiltration of the whole or of a large part of the ureter shortens it; this results in traction at the point of its insertion into the bladder wall, distorting and pulling the trigone out of the median line and changing the slight protuberance at the mouth of the ureter into a funnel shaped depression.

Frequently the ureteral orifice is swollen or shows tubercular ulceration. Obstruction of the canal by ulceration may occlude it and convert the kidney into a closed pyonephrotic or an infected hydronephrotic sac.

Clinical history of tuberculosis of the kidney. The course and the duration of the disease vary widely. The progress may be virulently rapid or the disease may last for years. The condition is usually latent for a time and when symptoms do appear, they may be so mild as to escape notice for some time.

Symptoms and signs: These can be divided into

(a) Urinary disturbances as polyuria, frequent urination, painful urination, hematuria and pyuria:

(b) Local symptoms: Pain (local and reflected), tenderness and tumor:

(c) General symptoms: Fever, loss of weight, etc.:

(d) Signs noted by cystoscopic examination and by ureteral catheterization:

(e) Pathological condition noted by laboratory measures:

Most of the symptoms and signs mentioned above are found also with other diseases of the kidney. We must therefore describe and differentiate them as they occur here, from similar symptoms occurring in other diseases.

Polyuria: Any irritating disease of the kidney or of its pelvis is apt to cause a polyuria of light color and of low specific gravity. In the early stages when the lesion is principally a congestion, the urine is like that from a congested kidney, scanty, high colored, of high specific gravity, etc.

Frequency of urination, often accompanied by pain is the symptom principally noticed by most patients. In tubercular kidney frequency occurs both by day and at night; in enlarged prostate frequency is most pronounced at night; in all other conditions accompanied by frequency this is most marked by day.

Painful urination is due early, to the discharge of the toxic urine through the bladder. Treatment for this is without effect. Later, ulceration of the trigone exaggerates the pain, the frequency and the tenesmus by night and by day until the patient is brought to the point of exhaustion from pain and from loss of sleep. Non-ulcerated tubercles of the bladder wall give no symptoms or but mild ones.

Hematuria: This is common and may be the only symptom present for some time. It usually appears for the first time after a caseous mass ulcerates into the renal pelvis, and may be considerable in amount. This attack is followed by other attacks at irregular and infrequent intervals and a few red cells are always found in the urine. The blood is well mixed with the urine; sometimes it presents clots in the form

of ureteral casts. The attacks of hematuria appear without apparent cause, such as jarring or traumatism; they are unaffected by motion and stop without apparent cause, differing in this and in the absence of accompanying pain, from hematuria due to renal calculus. The amount of blood is much less and the attacks are less frequent than with renal tumor except in the infrequent instances where the tubercular lesion is on the apex of a Malpighian pyramid, in which case the hemorrhage may be so profuse as to endanger life.

Pyuria: A few pus cells are almost always present. Pronounced pyuria appears only after secondary pyogenic infection. Spontaneous pyuria which is not due to the removal of any thing which temporarily obstructs the discharge from a pyonephrosis or an infected hydronephrosis, not to the relief of a urethral obstruction, is almost always due to renal tuberculosis, to stone or to both.

Local pain at sometimes or other is present in most cases. A dull ache in the loin is the most common form; this becomes worse when acute congestion sets in. Temporary blocking of the ureter causes retention of urine in the renal pelvis with pain in the loin, as a result of the tension and congestion. Pain is not necessarily a correct index of the condition present; a healthy kidney which has work suddenly thrown upon it is painful from acute congestion, and the less affected organ in bilateral disease may be the most acutely inflamed and therefore the most painful.

Reflex pain in the loin; A diseased seminal vesicle may be accompanied by a pain in the loin and in the presence of a tubercular kidney on the other side we may incorrectly diagnose tuberculosis of the second kidney.

Inflammation of a kidney may give crossed pains, the diseased kidney being painless and the healthy one being painful; this is called the renal reflex.

Pain reflected from the loins: any clot or mass of debris engaging in the pelvis or ureter causes renal colic.

Bladder pain, felt in the suprapubic or in the perineal region, is often present in renal tuberculosis and may be the most marked symptom while the bladder shows no sign of pathological change.

Tenderness of the kidney is often present and is best elicited by bimanual examination. If severe, it may be accompanied by muscular rigidity.

Tumor: A tubercular kidney becomes enlarged with the development of caseous masses till it may be twice the normal size. When it is complicated by a slowly formed pyonephrosis or by a perinephritis or when it co-exists with a renal tumor the mass is much larger.

A tubercular kidney may be enlarged but not palpable:

(a) when the caseated masses are of moderate size,

(b) when the caseated masses are limited to the upper pole and are not large enough to push the kidney down, and

(c) when the kidney is too flabby to be felt.

A closed pyonephrosis that was formed rapidly by a sudden complete obstruction of the ureter may be smaller than the normal kidney.

General symptoms: Malaise, anorexia and loss of weight are often present. The evening rise of temperature of tuberculosis is present, in 22 per cent of the cases of renal tuberculosis and in 80 per cent of those cases where the bladder is involved also. Chills, high

fever and sweats indicate that a secondary pyogenic infection is present. Signs of tuberculosis of other organs may be found.

Cystoscopic findings: The bladder may appear perfect and yet the kidney be tubercular. Tubercular ulcers at or about the ureteral orifice are strongly indicative of tuberculosis of the kidney above; tubercular ulcers about the urethral orifice point to tuberculosis of the prostate.

If the ureter is involved, its mouth is swollen, distorted or ulcerated. If a large part of it is affected, it is shortened and may pull the trigone out of its position and convert the prominence about the orifice of the ureter into a funnel shaped depression.

The fluid in the bladder may become turbid quickly by a discharge of pus from the kidney. In such a case more time may be gained for a good view by squeezing the pus out of the kidney by pressure on that organ while the bladder is being irrigated. In badly involved bladders it is best to use air inflation.

“Contracted bladder” is that condition where the bladder will hold but a small amount of water shortly after it had shown itself capable of fair distention. This is due to spasm and is generally found in tuberculosis of that organ.

The ureters are catheterized to get urine from the individual kidneys for comparison as to the amount secreted, the specific gravity, constituents and the presence or absence of tubercle bacilli in each. Kidney function tests, should be made at the same time, to learn the functionation power of each kidney. The diseased kidney shows a delayed and diminished reaction to the function tests.

Urine examination: The diseased

kidney secretes a greater amount of urine which is of lower specific gravity, contains less solids and shows pus cells, red cells and casts. The reaction is always acid unless ammoniagenic bacteria which render the urine ammoniacl are present. Tubercle bacilli should be looked for but, they are difficult to find even on repeated examinations. An acid urine containing pus and showing no bacteria by microscope, is suspicious of tuberculosis. After secondary infection sets in, the tubercle bacilli are found more readily and pus is plentiful.

Examination for tubercle bacilli: The tubercle bacilli must be differentiated from the smegma and the lepra bacilli. The lepra bacillus is very rare in this part of the world. The smegma bacillus is commonly found in the anterior urethra of the male and is exceedingly common and plentiful on the vulva and labia of the female. The urine should be drawn by catheter after carefully cleansing the parts, and is centrifuged for concentration.

Stains: The smear is dried and fixed. Stain with carbol fuchsin solution, steaming slightly for 5 minutes. Wash the excess of stain, in water. Decolorize in a 1 to 6 solution of nitric acid, all germs but tubercle bacilli will be decolorized.

Connterstaining the smear with methylene blue after decolorizing it will greatly aid in recognizing the tubercle bacilli, because the smegma bacilli take the counterstain while the tubercle bacilli do not.

Stain as above and wash off the excess of stain in water. Immerse the slide in absolute aleohol for 5 to 8 hours. Smegma bacilli are decolorized but tubercle bacilli are not if they are from acid urine.

Guinea pig inoculation should be made where tuberculosis is suspected

or where it is diagnosed but the germs are not found. If the guinea pig does not die within 6 weeks after the inoculation, it is killed and the characteristic tubercles are looked for; before inoculating the animal it is necessary to test it with tuberculin to see that it is not already tubercular.

Diagnosis: Diagnosis of renal tuberculosis must show which kidney is tubercular, or if both are diseased. It is also necessary that the functional capacity of the tubercular kidney and especially the condition of the second or better kidney be known, because the treatment depends on these factors.

Diagnosis of tuberculosis of the kidney is not always easy and in the early stages is very difficult. The frequent, painful urination, both by day and at night, is suspicious of tuberculosis of the urinary organs. Hematuria, usually slight, which occurs at irregular intervals coming and going without apparent cause, and in which the blood and urine are well mixed, is suggestive. Cystoscopic examination may show lesions at or about a ureteral orifice. Tubercle bacilli found in the urine drawn through a ureteral catheter is good presumptive proof of tuberculosis of that kidney, but, by itself, is not sufficient to condemn that organ. Recent investigations by the authors on a series of 600 phthisical patients has shown that in some cases, a kidney which is non-tubercular excretes tubercle bacilli.

Prognosis: Healing of tubercular lesions in the kidney by encapsulation is apparently unusual. Conversion of the diseased kidney into a closed pus sac is more common. It was found in 16 of 103 specimens of the Necker museum.

The rapidity of the spread of the process depends on the resistance of the

individual and to a less extent on the secondary infection which occurs in time.

The bladder usually becomes involved within two years. The extent of the process in the kidney cannot be judged in every case by the amount of bladder involvement present.

Longevity: Tuberculosis of the kidney is more virulent than tuberculosis of the other genito-urinary organs. The average length of life after the appearance of the symptoms is given by various authors as from three to five years. Some die in a few months and some are alive after 10 or more.

Prognosis as to comfort: If the ureter is patent and the bladder is not ulcerated, the patient may be comfortable. Usually however, painful, frequent urination appears before the bladder shows pathological changes.

Treatment: The results of medical treatment are not encouraging. Apparent cures are few. The ordinary anti-tubercular remedies, good hygiene, open air, nourishing diet, cod liver oil, guaiacol, etc., are used. The urine is kept acid and the bladder symptoms are relieved by sedatives like belladonna, hyoscyamus, or codein by mouth or as rectal suppositories.

Surgical treatment: Indications and contraindications: In general, the prognosis of non-operative cases is bad; of cases operated on it is fair. Every kidney functionates somewhat unless it has been changed into a closed pyonephrosis. On the other hand, the toxins produced in it irritate the other kidney during their elimination and may induce a toxic nephritis; if the second kidney is somewhat affected already, this irritation may prevent it from recovering. If the functional valve of the diseased kidney is or probably will be more than counterbalanced by its acting as a focus of infection, it

should be removed provided the shock of the operation will not be too severe for the patient, the other kidney is in good enough condition to support life and there is no compelling contraindication in some other organ.

Choice of operation: We may do either nephrectomy or nephrotomy. With modern technique, nephrectomy is not excessively dangerous and the ultimate result is much better than that of nephrotomy. When the better kidney is not in very good condition (this may be perhaps only functional from a toxic nephritis) as shown by functional tests and the worse kidney presents a pyonephrosis or a perirenal abscess, a preliminary nephrotomy should be done on the badly injured kidney; the patient is then strengthened and built up and the better kidney is given an opportunity to recuperate; later a secondary nephrectomy may be performed.

The results of operation on tubercular kidneys can be judged from Kelly's reports of cases in groups, these being arranged according to the kinds of complications, if any.

First group: The tubercular process was clinically limited to the kidney: Results—no deaths, primary

nor secondary.

Second group: These showed extensive bladder involvement. The primary death rate was 11 1-2 per cent; the secondary death rate within a year was 26 per cent; 60 per cent was cured.

Third group: This group with phthisis as a complication, showed 80 per cent cure.

Fourth group: This group showed tubercular testes or ovaries. The affected genitals were removed: 80 per cent were cured.

Death is due to collapse, hemorrhage, exhaustion, insufficiency or tuberculosis of the second kidney, or to general miliary tuberculosis.

The relation of Subjective symptoms to lesions of the kidney; the relation of symptoms to the presence of tubercle bacilli. The relation of tubercle bacilli found in the urine as compared to Pathological lesions in the kidney: and when is a kidney tuberculous? We refer to a report of the study of 600 cases.

"The Urinary Tract in Pulmonary Tuberculosis" by the Author. The Journal of the American Medical Association, March 2, 1918, Vol. 70, pp 591-593.

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STATE BOARD OF MEDICAL EXAMINERS

QUESTIONS BY STATE BOARD MEDICAL EXAMINERS SOUTH CAROLINA JUNE 1918

**Obstetrics. Dr. E. W. Pressly,
Examiner, June 1918**

1. State the diagnosis, complications and treatment of multiple pregnancy.
2. Give the etiology, symptomatology, prognosis and treatment of chorea gravidarum.
3. Give the etiology, symptomatology, prognosis and management of abruptio placentae.
4. Diagnose and give treatment of placenta praevia.
5. Give the symptoms and treatment of ante partum eclampsia.
6. Name six of the more serious accidents that may occur to the mother during parturition.
7. Name six of the graver accidents that may happen to the child during delivery.
8. What is post partum hemorrhage? What are its principal causes and what is its management?
9. Describe the etiology, symptoms, prognosis and treatment of sphaemias puerperalis.
10. Name the conditions justifying the introduction of the hand in utero during parturition.

**Materia Medica. Junior Curriculum.
Dr. H. L. Shaw, Examiner, June 1918**

1. Name two vaso-dilators.
2. Name two vaso-constrictors.
3. Name two Antipyretics.
4. Name two emetics.

Give dose to effect of each of the above drugs.

5. Give dose and Therapeutic effect of: (a) Sul. Morphine. (b) Atropine Sulphate. (c) Chloral Hydrate. (d) Caffein Citrate, (e) Salol.

Therapeutics. Senior Curriculum

1. (a) Discuss the Physiological action of Salicylic Acid, when applied externally and locally. (b) Name an official Salt of Salicylic Acid, give dose and therapeutic use of same.
2. (a) Give one therapeutic use of Belladonna and one of Atropine. (b) What are the symptoms of Belladonna poisoning?
3. (a) Give a classification of Expectorants and an example of each. (b) Write a prescription containing a stimulant expectorant, giving dose and directions to patient.
4. (a) Discuss the action of Hypnotics. (b) Name one, give dose and therapeutic indications.
5. (a) What preparation of Arsenic do you prefer for internal use? (b) Give doses and therapeutic indications.
6. In case of Uremic Coma what therapeutic agents would you employ and how administer?
7. Give two therapeutic uses of Ipecac and the dose in each instance.
8. (a) Mention a condition in which Digitalis is indicated, (b) Contradicated and give your reasons why in both cases.
9. (a) What are the therapeutic indications for the use of Nux Vomica? (b) Name two official Salts of its

principal alkaloid, and give dose of each.

10. Give the official preparations of ether, Mode of administration and therapeutic uses.

Practice of Medicine. Dr. J. J. Watson, Examiner, June 1918

1. Mr. B. age 28 was examined March 10th. Family history negative. Past history negative. Present complaint: about 3 mos. ago commenced with headache, at times very severe, occasionally with these headaches he would vomit. About 8 weeks ago while driving his motor car, became blind for a few minutes. These symptoms have increased in frequency and severity until the present, when he has severe headache and vomiting at some time during each day. His blind spells are also becoming more frequent. Temp. normal, Pulse 56 to 74. Resp. 20.

Physical Examination. Well nourished man, very muscular, all examinations negative including blood, and cerebro spinal fluid, except exaggerated reflexes on left side, with occasional ankle clonus and Babinski. Optic discs show double choke, with small hemorrhage into right disc. From the above history and clinical findings make a diagnosis and give your reasons.

2. Describe a case of paroxysmal tachycardia.

3. A case of lobar pneumonia after the crisis, commences to have temperature that runs from 100 degrees to 103 degrees. Pulse 100 to 130. Respiration 26 to 42. What conditions would you consider as the most probable cause of the trouble?

4. Discuss the clinical significance of Achylia Gastrica.

5. What symptoms would you re-

quire to make a diagnosis of Typhoid fever, and what are the ordinary laboratory findings?

6. What symptoms and laboratory findings would you require to make a diagnosis of pyelitis?

7. Mention the causes of acute nephritis. What are the symptoms of acute glomerular nephritis, also urinary findings?

8. From the following history and clinical findings what would be your interpretations in this case and give your reasons for arriving at these conclusions.

Mr. R., 58 years old, lawyer, has lost 8 lbs. in last year. Family history, negative; past history, typhoid fever 18 years ago. **Present complaint**—“General weakness” and “Stomach trouble.” So weak that he can hardly walk. Has gnawing pain in pit of stomach and below navel. It is constant. Sometimes keeps him awake at night. Occasional headaches for which he takes “some kind of a powder.” Takes one or two doses of this powder a day. For insomnia he takes 10 grs. of Trional 4 or 5 times a week. Bowels are fairly regular. **Physical Examination**—Fairly well nourished man, face and hands cyanotic. In fact a general cyanosis, extensive oral sepsis, no glandular enlargements, pupils equal and react, lungs negative, heart sounds indistinct, no murmurs, rhythm regular, abdomen flat and soft, no masses found, slight tenderness over McBurney’s point, knee kicks normal, Prostate normal, Hemoglobin 110 per cent. R. B. C., not counted, W. B. C. 760, blood pressure Sys. 126. Dias. 54, urine negative, Wasserman negative, no dyspnoea, no oedema, test breakfast, withdrawn in 1 hour gives free H. C. S. 20. Total H. C. L. 32, no occult blood, stool negative. **X ray report, Picture 0. 1.** Immediat after

barium meal marked pylorospasm. **Picture 0. 2.** 15 minutes later, marked pylorospasm with no Barium in duodenum. **Picture 0. 3.** 5 1-2 hours after Barium meal, shows no residue in stomach, small amount is seen in the first portion of the duodenum, the remainder is in the ileum, it appears that a small portion has gotten in the appendix. (b) What instructions and advice would you give this patient?

9. Describe a case of Von Recklinghausen's disease.

10. Describe a case of Psoriasis.

Bacteriology and Pathology. Junior Curr. Dr. John Lyon, Exam., June, 1918

1. Describe the different steps in the staining technic of the tubercle bacillus.

2. Describe the bacteriologic method of recognizing carriers of epidemic cerebospinal meningitis.

3. What are the laboratory methods for the diagnosis of hookworm infection? Give the life history of the parasite.

4. Describe the pathologic lung changes in the several stages of acute lobar pneumonia.

5. Contrast the blood pictures of (a) profound secondary anaemia, (b) advanced pernicious anaemia, (c) lymphatic leukaemia.

Gynecology and Pediatrics. Senior Curriculum

1. Give the symptoms of acute torsion of the pedicle of an ovarian cyst. Mention the conditions for which it may be mistaken and give the points of diagnostic difference.

2. A man brings his wife to you stating that she is sterile. How would

you proceed to find the cause and aid in inducing conception?

3. Mention the parts of the genital tract of the female which frequently become infected by the gonococcus. Give the symptoms and treatment of one of these parts so infected.

4. Give the symptoms and treatment of tubal pregnancy: (a) before rupture, (b) after rupture.

5. Discuss briefly the value of the pessary in gynecology.

6. An infant six months of age has summer diarrhoea. How would you proceed to find the cause and treat such a case?

7. At what stage of the disease does the nephritis of scarlet fever usually develop? Give its prophylactic and curative treatment.

8. Give the etiology, symptoms and treatment of infantile scurvy. Differentiate it from rheumatism.

9. A child six years has enlarged cervical glands of several months duration. How would you proceed to make a diagnosis?

10. Give the clinical points of difference between diphtheria, tonsilitis and croup. In case there is any doubt as to your diagnosis in such a case what would you do?

Anatomy. Junior Curriculum. Dr. J. T. Taylor, Examiner, June, 1918

1. Describe the Scapula.

2. Name the muscles of the orbital region.

3. Name the branches of the femoral artery.

4. Give the formation of the brachial plexus.

5. What openings are found in the left auricle?

Anatomy. Senior Curriculum

1. Describe the Axilla—naming the blood vessels and nerves found therein.
2. Name the deep arteries of the abdominal walls.
3. In a fracture of the shaft of the humerus, the injury of what nerve is nearly always the cause of paralysis? In what ways may the injury occur?
4. Name the coverings, from within outward, of an oblique inguinal hernia.
5. Trace the femoral artery from Poupart's ligament to where it becomes the popliteal artery.
6. In operating for the removal of enlarged cervical nodes, what nerve is it absolutely important to avoid? What is the result if it is severed? Why is it apt to be permanent?
7. Why is hemorrhage of the blood vessels of the liver very serious and often fatal?
8. In doing a paracentesis of the Tympa-num, what is the point of selection? Why this point?
9. Given a bullet in the pleural cavity, where would you make your incision for its removal? Why do you select this point?
10. When an aneurismal sac is connected with the back part of the abdominal aorta near the Coeliac axis, give the cause and location of the pains.

Surgery. Dr. Harry H. Wyman, Examiner, June, 1918

1. What might cause inflammation. Give blood picture a sto white cells in inflammation.
2. In palmar abscess describe incision to drain and reason for special incision.

3. In a fracture of lower end of humerus extending into articular surface, what position would you put the arm and forearm for best results and why?
4. Differentiate between acute synovitis of knee joint and acute osteomyelitis near the joint. Give treatment of the osteomyelitis.
5. What organs and regions does a right rectus incision give access to. Describe the technique of making the incision and the closing of it.
6. In excision of knee joint, describe the making of the flap used and why this flap.
7. Give symptoms, diagnosis and treatment of a cyst of Bartholin's gland.
8. In diabetic gangrene commencing in a foot when would you operate and give preparation of patient for becoming a better surgical risk.
9. What is a pterygium? Describe operation for removal.
10. What is chief cause of aneurysms?

Chemistry and Physiology. Dr. A. M. Brailsford, Examiner, June, 1918.**Junior Curriculum**

1. Discuss the clotting of blood.
2. Explain the elaboration of the gastric juice and the reason the walls of the stomach are not digested.
3. If a nerve of sensation were successfully grafted to one of motion, would it convey motor impulses?
4. What tests (chemical and bacteriological) should be made in order to insure a pure drinking water?
5. How would you determine the quality and purity of milk?

Hygiene, Sanitation, State Medicine. Senior Curriculum

1. What action would you take if a case of Cerebro-Spinal Meningitis developed in your community?
2. Discuss Venereal prophylaxis.
3. What diseases are carried by mosquitoes and mention the respective mosquito in each case and the breeding places of the different types of the mosquitoes and the methods of extermination.
4. Discuss the history of the house fly.
5. (a) What are disinfectants? (b) Mention the most important. (c) Give a satisfactory method of fumigating woolen clothing and blankets.
6. What should be the air space and the amount of fresh air per hour for each individual in a public ward?
7. Discuss rural sanitation.
8. Mention the tropical diseases, the causes of each, and state how they may be prevented or stamped out.
9. Give method of controlling spread of Hook-worm.
10. Give method of controlling spread of Typhoid fever.

Urinalysis, Microscopy, Toxicology and Medical Jurisprudence. Dr. A. Earle Boozer, Examiner, June, 1918

1. What is the clinical significance of diacetic acid in the urine? Give a reliable test for same.
2. What is the disadvantage of Fehling's Solution and how obviated?
3. How much albumin is usually in the urine of albuminuria?
4. How are blood and pus best detected in the urine?
5. Give technique for routine examination of the urine both chemically and microscopically.
6. What are the symptoms of bella-

donna poisoning? What diseases does it simulate?

7. How can chronic poisoning by mercury be produced?
8. Give the post mortem findings of death by asphyxia.
9. In the case of an incised wound how would you determine whether it was made before or after death?
10. A man may receive two wounds on provocation at different times and from different persons and die after receiving the second; in such a case the course of justice may require that a medical witness should state which wound was the cause of death. How would you distinguish the guilty from the innocent?

Nurses. Obstetrics. Dr. E. W. Pressly, Examiner, June, 1918

1. Define 10 of the following terms: gravidity, embryotomy, abortifacient, after pains, ante partum, conception, cyanotic, diaphoretic, eclampsia, evisceration, ex sanguinated, iuterus neonatorum, leucorrhœa, mammary, parturient, diuretic.
2. What is included in the term Obstetric nursing?
3. What is the puerperium, and what is its ordinary duration?
4. Give the differential diagnosis of false pains from true pains.
5. Differentiate abortion, miscarriage and premature labor.
6. Describe the preparation of the bed, the woman, the physician and the nurse for labor.
7. Describe the delivery of the placenta by Crede's method.
8. What care does the mother require for the three hours following the delivery of the placenta?
9. What is premature respiration? How is it occasioned and what is its principal danger?

10. What mechanical cause may give rise to umbilical hemorrhage in the new born and how should hemorrhage thus arising be controlled?

Nurses. Materia Medica, and Therapeutics. Dr. H. L. Shaw, Exam., June, 1918

1. (a) A solution marked 1-20 means what? (b) How would you make a five per cent solution of Carbolic Acid?

2. Give name of drug and dose to: (a) relieve pain, (b) check Diaphoresis, (c) produce Emesis, (d) reduce temperature, (e) increase heart's action.

In the absence of a physician what therapeutic agent would you employ in treating:

3. Shock due to injury?
4. Intestinal Hemorrhage in Typhoid patient?
5. Convulsions in a child?

Nurses. Practice of Medicine. Dr. J. J. Watson, Examiner, June, 1918

1. What temperature would you consider (a) moderate fever, (b) high fever.

2. In what diseases are you most likely to have chills?

3. What do you consider the best method to produce emesis?

4. Under what conditions would you consider the production of emesis necessary?

5. You are called upon to administer to a woman who has fainted in a crowd, what would you do?

Nurses. Dietetics. Dr. John Lyon, Examiner, June, 1918

1. Classify foods according to their

chemical composition and give two examples of each class.

2. Mention two perfect foods furnished by the animal kingdom and give the nitrogenous principle of each.

3. You are instructed to give an infant a mixture of barley water and pasteurized milk. How would you prepare and administer the same?

4. How would you prepare and administer glucose enemas?

5. Give two methods of preserving eggs.

6. How would you nourish an unconscious patient?

7. How would you care for nursing bottles and nipples?

8. Give the dietetic management of a surgical case (abdominal operation) before and after operation.

9. Give the dietetic management of an uncomplicated case of typhoid fever. What change would you make if hemorrhage or perforation is suspected?

10. How would you make (a) Whey? (b) Beef tea? (c) Chicken broth?

Nurses. Anatomy. Dr. J. T. Taylor, Examiner, June, 1918

1. Describe the lungs. What is their function?

2. Locate by diagram, or otherwise, the position of (a) spleen, (b) liver, (c) ovaries.

3. Describe the thigh bone. With what bones does it articulate?

4. Name the blood vessels in order, by which the blood is conveyed from the left ventricle to the hand.

5. Name the bones of the cranium.

6. Name in order, beginning with the mouth, the divisions of the Alimentary tract.

7. Name and describe the bones of the pelvis.

8. What is the drum membrane? What is its function?
9. Name the nerves of (a) hearing, (b) seeing, (c) smelling.
10. How many vertebrae are there? How many ribs?

Nurses. Physiology. Dr. A. M. Brailsford, Examiner, June, 1918

1. What changes occur in the circulation of an infant at birth?
2. By what ferment are starches digested and where found?
3. What part of the brain is concerned in maintaining equilibrium?

4. Mention two ductless glands (Internal secretion).
5. What are the functions of the skin?

Hygiene and Sanitation

1. How would you care for a bottle fed baby?
2. What precautions should be observed in nursing a case of tuberculosis (pulmonary)?
3. Ventilate the room of a patient during freezing weather.
4. By what methods may blankets be cleaned and sterilized?
5. Discuss oral hygiene.

ABSTRACTS

THE SURGERY OF LARYGEAL MALIGNANCY

Hubert Arrowsmith, M. D., Brooklyn

From the author's observations of Mackenty's work and his own recent experience, modeled very closely thereon, he is inclined to tentatively suggest the adoption of Moure's antecedent tracheotomy, to accustom the lower air passages to the direct impact of air, which may lessen their immediate post-operative irritability and susceptibility; the tracheal opening to be made high, as Jackson has indicated, because that will not interfere with the later mobilization of the trachea. Otherwise the two step operation seems to offer no special advantage. This is the ideal field for the employment of oil-ether colonic anesthesia, as devised by Gwathmey. It makes the whole procedure infinitely easier for both patient and operator. Even if really painless under local

anesthesia, such an ordeal produces an enormous apprehension which cannot but be detrimental to the patient, and the degree of infiltration of the tissues necessary to produce insensitiveness must interfere with their repair. With rectal anesthesia laryngeal spasm does not occur, bleeding is very much less, there is no tracheobronchial irritation from the directly inspired anesthetic, which very largely obviates the necessity for subsequent repeated applications of the suction apparatus—in itself an agent of some danger—and there is much less likelihood of post-operative vomiting, most undesirable under these conditions.

The laryngologist for every possible reason is the man who should do laryngectomy, both external and internal. If he saw all these patients at an early date, thyrotomy would more often be performed.

Laryngectomy cannot be repudiated on any such grounds as the mutilation,

or the loss of voice. Laryngectomized patients are in no worse case than the blind, the deaf or the helplessly crippled. Many of them seem to get a fair amount of happiness out of the mere fact of existence, and are not by any means incapable of self support. In judiciously chosen cases this operation offers a good deal more than a probability of clinical cure, and in most instances a definite retardation of the fatal ending.

Of two cases operated by the writer, one died six weeks later of pneumonia. The other is in good condition, now six months after operation, and at work.

A third case in whom only a tracheotomy was done, his final sufferings were so great that the author regrets that he did not give the patient "a fighting chance by as far reaching a dissection as possible," rather than witness such sufferings as this man endured during the last six months of his life.

DISCUSSION

Dr. John E. MacKenty, New York City: The main trouble is that the cases come to us too late for any hope of permanent cure. Of twenty-three cases seen by me since last September, seventeen were inoperable, except in the way of alleviation. Only one case of the twenty-three was incipient. Now, that is a terrible commentary on the present condition of the diagnosis of this disease. There is a fault somewhere, and as Dr. Arrowsmith says, I think it is largely with the general practitioner, who does not take notice of the early symptoms. Anyone of cancer age complaining of hoarseness which lasts for more than six weeks should be under observation. There is no question that the mortality has decreased during the last few years. Up

to seven or eight years ago it was very high. At the present day, those taking this work up have a different experience, and find the operative mortality much lower. I think that care in the technic will reduce the operative mortality to a very small fraction.

Partial laryngectomy is a seldom required operation. I have added no cases of this procedure to the former record. I have seen none requiring it. Besides, hemilaryngectomy is more dangerous as an operative procedure than total laryngectomy. I think that a lot depends on getting the cases over the surgical end of it, on the post-operative treatment, more than we realize; it is the neglect of the small details following operation that produces the mortality.

I am wedded to the one stage operation, but I am not prejudiced, I hope, and see some reason now in the use of the high tracheotomy that does not in any way injure the trachea. I object to the other because it injures the trachea.

I have been impressed by Dr. Arrowsmith's exhibition of colonic anesthesia. Having seen it used in this type of operation, I am going to give it a thorough trial. I believe that in colonic anesthesia we have made an advance in this work, because it lessens the amount of hemorrhage and of blood getting into the trachea, which I consider very important in guarding the patient against pneumonia.

Dr. Cornelius G. Coakley, New York City. It would seem to me that a one-stage operation is, in some cases, much to be preferred to a two stage operation. If the growth is small, and you can afford to wait for the adjustment of the respiratory tract to the new method of breathing, all right; but if the case is likely to result in total laryngectomy

the one stage operation is to be preferred.

Dr. Robert Clyde Lynch, New Orleans: I have now six cases of intrinsic carcinoma of the larynx that I have operated on under suspension. Four of these patients are perfectly well at the present time. In the remotest case, it has been four years since the time of operation; in the most recent, about eight months. So far, there has been no recurrence, but I want to be sure that you understand that it is not good advice to give you at this time to operate on cases of intrinsic carcinoma of the larynx by that means. I am afraid that some men might think that this is an operation of choice and do it, and thus do more harm than good. In the second place, it would seem to me that as we progress along the line of study of operation for carcinoma of the larynx, the operations are going to divide themselves into two types—the thyroidotomy and the laryngectomy types. The cases requiring hemilaryngectomy will, very likely, give much better results under total laryngectomy. I have had seven cases with five cures and no immediate deaths, within ten days from the operation. The recurrence taking place within ten months in the shortest time. That is, the patients who got the least benefit from the laryngectomy lived ten months, and in this particular case he was especially grateful for this added period to his life, in order to wind up his affairs so that he might leave them in shape for his family. Five of these patients are perfectly well up until the present time. Three of them are farmers who have been through three crops. That is, they have planted and harvested their crops three times, and their families have been provided for by that means. The others are clerks, and all are particularly happy and grateful. All can

do without pad and pencil, in that they have been able to develop a type of speech that is understandable by their associates.

My procedure has always been by means of a preliminary tracheotomy, and at first low down, but now high up. I have not seen any cases in which the tumors have grown so large within two or three weeks following the tracheotomy as to make me feel that the tracheotomy itself had jeopardized the patient's welfare as far as his recovery was concerned. Giving always the ether vapor anesthesia, and giving the vapor through the tracheotomy tube has certainly facilitated every manipulation during the operative procedure. I now take away with the larynx the superficial thyroid muscles, the sternothyroid and sternohyoid, that group of muscles overlying the anterior face of the larynx.

I first started rectal feeding after the operation, but that has been supplanted by the use of the nasal tube or the introduction of the small catheter, just as one would do with a stomach tube, keeping the end of the catheter out of the stomach; that is important, in order to get away from the nausea or postfeeding vomiting. The tube should be inserted down to the neck, so that the esophagus may take care of the swallowing to the stomach.

The method of the care of the trachea, to me, has seemed very important. I pare the trachea and larynx, and attempt to separate at one point the trachea from the esophagus, and then I put in a tape, so that I may hold the trachea up until it is bent in that fashion. When things are ready I cut the trachea from above down, and the only bleeding that occurs is from the mucous membrane of the trachea. Before the trachea is cut a heavy silk suture is put in and held by an assistant. This prevents any blood from

going down into the trachea. The anesthesia is carried on through a very small tracheotomy tube, which lies in the opening, and is also under the care of the assistant, who steadies the trachea. He has nothing to do but be sure that nothing enters the trachea. I do not know whether that is what keeps us from pneumonia or not, but we had no postoperative disturbance, and the remarkable gain in weight and the comfort that these people enjoy after the removal of the mass make it well worth while. It does seem to me that laryngectomy is not nearly so bad a thing for the patient as one would gather from reading the older articles on these subjects.

Dr. Harmon Smith, New York City: The reader of the paper cited a report of a case made by me. Last week I saw the woman. Her voice has returned, and she has gained in weight, although that was not necessary, as she weighed two hundred pounds to begin with. I believe that it was of low grade malignancy, of a papilloma carcinomatous variety.

Dr. D. Bryson Belavan, New York City: Yesterday morning I exhibited to a number of members of the society a patient who had been operated on by a friend of mine in New York City twenty-one years ago, two-thirds of the larynx being removed, and he is perfectly well today. That is one of the few cases followed and the end results studied.

Dr. Hubert Arrowsmith, Brooklyn, closing: The plea I make is one of the utmost importance. If we are going to reach conclusions we want to know what becomes of the patient. Perhaps we do not all realize that our distinguished honorary president, Dr. Solis Cohen, was the originator of this method of handling the stump of the trachea, an invaluable step in the after



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treatment of laryngectomy, and I think that he was the first to do a laryngectomy in America.

Dr. J. Solis Cohen, Philadelphia: I was not the first to do a laryngectomy, but the first to report the case.

A CARCINOMA OF THE EPIGLOTIS AND ROOT OF THE TONGUE REMOVED BY THE SIMPSON RADIUM NEEDLES, WITH DESCRIPTION OF A NEEDLE-PLACING INSTRUMENT

Otto T. Freer, M. D., Chicago

Dr. Frank Edward Simpson, of Chicago, in 1914 devised short, hollow needles one and one-sixteenth of an inch long and one-sixteenth of an inch thick, made of steel and platinum plated with gold, the cavity of the needle being packed with twelve millimeters of radium sulphate, which is sealed within the needle after the detachable eye portion of the needle has been screwed down upon its hollow shank. The wall of the hollow needle is three-tenths of a millimeter thick—thick enough to filter out the irritating alpha and softer beta rays, while permitting the hard beta and gamma rays to pass freely through the wall of the needle.

The needles are stout enough to endure the firm grasp of a needle holder for their introduction into the tissues.

With several Simpson needles the effective so-called cross-firing of radium rays may be produced—that is, instead of the radium rays proceeding from a single source in the center of a growth it is easy to place a number of needles at its periphery as well as in the center, so that not only is the growth evenly influenced by multiple radiation, but the apparently healthy zone about the tumor is deeply penetrated by the

rays, so helping to prevent a local return of the growth.

A valuable quality of the needles is their comparatively easy insertion, so that only occasionally, where a tumor is tough and resistant, is it necessary to place them in a preliminary knife cut, for as a rule they may be directly thrust into the growth.

It is generally agreed that malignant tumors should be destroyed at one sitting by one very large dose of radium. This is not only done in order to minimize the danger of metastases risked by waiting for the effect of lesser doses at intervals, but it is experience that the effect of a single large dose is proportionately greater than that of the sum of smaller ones that equal it in quantity. It has also been found that a tumor is less influenced by later doses than by the first one, a species of tolerance being established for radium. The demand for a single completely effective large dose of radium rays is filled by leaving the Simpson needles in place for from nine to twelve hours. Their efficient screening prevents the undesirable integumental burns that were so common before it became known that the soft beta rays and the alpha rays must be filtered out.

The difficulty in accurately inserting the needles with forceps in this case, the roughening of the surface of the costly needle by the blades and the annoyance caused by the dragging thread that trailed the needle, led the writer to construct a needle placer for inserting the needles, a device which in the case of a carcinoma of the laryngopharynx just treated has permitted their exact introduction into the flesh with an accuracy and ease that, he thinks, will make it possible to needle even intrinsic carcinomas of the larynx by the indirect, mirror method of laryngoscopy, a method so much less

distressing to the patient than direct or suspension laryngoscopy.

OBSERVATIONS ON PNEUMOCOCUS INFECTION OF NASAL ACCESSORY SINUSES

Cornelius G. Coakley, M. D., New York

One hundred and eighty-eight cases were observed. The acute ones with the history of a duration of one month or less numbered one hundred and nine. The remainder were chronic.

Pneumococci were present in forty-four per cent of the acute cases, and in most of these they were the sole organism. In the chronic cases this organism was found in but thirteen per cent.

These results seem to warrant the inference that in acute inflammations probably half the cases might be due to autoinfection, while the other half were due to infection from some outside source.

In the chronic cases the larger number were accompanied by autoinfecting organisms.

The author records a case of pneumococcus tonsillitis followed at an interval of two weeks with a pneumococcus infection of the left antrum. In the second case both antra were successively involved, one at a later period than the other, with a pneumococcus in each instance.

The third case had beginning infection in the larynx and trachea, secondarily involving his antrum, with pneumococci.

The fourth case had a bilateral maxillary sinusitis; there was a pure culture of the pneumococcus in both. Signs of consolidation were found at the base of the right lung next day, and antipneumococcus serum was administered, followed by a chill, rising temperature to 106°, and an immediate



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(1941)

drop in the temperature with pneumococcus in his sputum, without any further attention to his antra, as the patient was too ill to be treated. Spontaneous recovery followed.

The writer asks what role the serum played in curing his maxillary sinuitis?

The fifth case recorded was the wife of the preceding patient, with pure culture of pneumococcus from the discharge, evidently following infection from her husband.

The sixth case was one of an acute otitis with pure culture of the pneumococcus arising from an infection of the same character in the left antrum.

From a study of this series of cases the writer feels justified in drawing the two following conclusions:

First.—Pneumococcus infection of the nose and its accessory sinuses does not in any large percentage of cases result in a pneumococcal infection of the lungs. Only one of our cases developed pneumonia.

Second.—There would seem to be direct evidence that in one of the cases the infection, pneumococcus I, was transferred from husband to wife.

We hold that most severe acute rhinitis attacks are the result of infection, either with autogenous or foreign bacteria or viruses. The presence of pneumococcus rhinitis and sinuitis during the stage of profuse secretion, accompanied by coughing and sneezing, must be a fruitful source of disseminating pneumococci, some of which may only invade the upper air passages of the victims of the infection, while in other patients, finding a suitable soil in the deeper air passages produce a pneumonia. There is abundant evidence that pneumonia is infective, and may not one source of infection be in these pneumococcal head colds?

DISCUSSION

Dr. Clement F. Theisen, Albany: Some time ago I published a paper on

“Pneumococcus Infection of the Nasal Cavities in Children,” which was based on a small epidemic that I witnessed in the Child’s Hospital in Albany. In these cases the children ranged from four to fourteen years of age, and numbered not over half a dozen. We obtained in all the cases the pneumococcus from the nasal secretion. In two cases there was a marked exophthalmos with serious ethmoidal and frontal involvement. These two children were operated on and made good recoveries. We had one death, in a child of four, with sinus involvement and a high temperature. Pneumococcal serum was administered without effect. In all the cases there was profuse nasal discharge, very high temperature and very serious involvement of the cervical lymphatics, and the pneumococcus was obtained in pure culture from the nasal secretion.

Dr. Henry L. Swain, New Haven: I had three cases this winter in which the pneumococcus Type I was found, and in which the immediate onset of pneumonia necessitated the calling in of an internist, in order that the necessary attention might be given to the chest condition, so that I could not follow the case for a number of days. Two of the three cases recovered and one did not. The sinus condition absolutely cleared up within three days after the administration of the pneumococcal serum in those that recovered.

Dr. Cornelius G. Coakley, New York City, closing: The only case in which the question of giving pneumococcal serum of Type I was the one in which the serum was very efficacious. I was surprised to find that from such a severe attack the patient recovered from his sinuitis without further treatment. Of course, they might have recovered without it. Some recover without treatment.

Chlorazene

USE IT AS A PROPHYLACTIC AGAINST
SPANISH INFLUENZA

McCord, Friedlander and Walker, of Camp Sherman, in the July 27th issue of the A. M. A. Journal, report remarkable results with gargles of CHLORAZENE, followed by Dichloramine-T sprays in the treatment of diphtheria patients and diphtheria carriers.

Capt. Paul G. Woolley, of Camp Greene, in the Journal of Laboratory and Clinical Medicine for April, says: "In the only organization which made use of systematic nasal sprays since the first of the year not a single case (of meningitis) developed. . . . One comes to have a very healthy respect for Dichloramine-T as an agent for the prevention of diseases of upper respiratory tract origin."

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(Atlanta Medical College)

Sixty-fourth annual session begins September 23rd, 1918.

Sixty-fourth annual session begins September 23rd, 1918.
ADMISSION: Completion of four-year course at an accredited high school, which requires not less than 14 units for graduation, and in addition, two years of college credits in Physics, Biology, Inorganic Chemistry, and German or French. The pre-medical course may be taken in the College of Liberal Arts at Oxford, Ga. Admission to the pre-medical course may be obtained by presenting credentials of 14 units of high school work.

COMBINATION: A student may enter the regular Freshman class on 14 units and attend the College of Liberal Arts for two years, after which he will be admitted to the Freshman Medical Class, and upon the completion of his Sophomore year in the Medical College, can obtain the degree of Bachelor of Science, gaining his M. D. degree after another two years at the Medical College.

INSTRUCTION: Thorough laboratory training and systematic clinical teaching are special features of this institution. The faculty is composed of 106 professors and instructors, twelve of whom are full-time salaried men.

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These tests formed part of an investigation of compressed yeast as a therapeutic agent, made at the Jefferson Medical College, the Philadelphia General Hospital, and the New York Roosevelt Hospital, and reported by Philip B. Hawk, Ph. D. (Journal A. M. A. Vol. LXIX, NO.15),

“In furunculosis,” the report states, “yeast is a remarkably efficacious remedy. Its curative action in these cases is no doubt aided by the leukocytosis which is developed.”

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This is a splendid apparatus for the general practitioner, as it makes it possible to install an x-ray laboratory — including, in addition to the "Universal, Jr." transformer, the highest quality combination stereoscopic table and stand, a stereoscope, an x-ray tube, intensifying screen, dark room accessories, x-ray plates, etc. — an equipment capable of turning out the finest radiographic work of all parts of the body, for less than \$1400.00 on the alternating current and \$1460.00 on the direct current.



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The Journal

OF THE South Carolina Medical Association



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PUBLIC HEALTH.

J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.

E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

THE COUNTY SOCIETY PROGRAM FOR 1919

It is highly important that the County Society, now that the war is over, resume active work at once. We should have a live organization to grapple with the problems of the near future but especially to give a medium of expression to the vast store house of knowledge which will be available through the returning members from the battlefields of Europe.

GREETING

The Journal extends most cordial greetings to its readers this Christmas season. The South Carolina Medical Association and The Journal have

emerged from the war period without serious mishap. The Secretary-Editor has given much of his time for a year and a half to the work of the District Exemption Board and many of our associate editors and contributors have likewise been engaged in extra duties for the service.

The determination on the part of the County Societies to keep the members at the front in good standing by paying their dues has kept the membership almost up to normal. Of course growth ceased for obvious reasons. The Journal owes much to numerous staunch advertisers who have been loyal throughout a very trying period. We would not forget them in our good wishes.

MORE PAPERS NEEDED

For the first time in our history The Journal is short of material for publication, owing to war conditions.

We earnestly request our members to send us reports of cases, reports of clinics and papers read before constituent societies immediately. We solicit scientific papers from individual members also. We urge that some of these papers reach us by January 1st and then by the first of each month until the State Association meets at Florence in April.

PUBLIC HEALTH LEGISLATION IN 1919

South Carolina, from a Public Health standpoint, has been in the limelight to an unusual degree for the past two years. From this experience the State Board of Health will present to the next Legislature bills for the further protection of the health of our citizens and request appropriations sufficient to meet the expenses of a rapidly expanding policy. Fortunate indeed has been the fact that Dr. Jas. A. Hayne, the President of the South Carolina Medical Association, and the

State Health officer has been at the helm of affairs at this time.

We urge every member of the Association to support him in whatever legislation may be proposed.

ORGANIZED MEDICINE AND THE TEST OF WAR RECONSTRUCTION

The success attained by the medical profession in conducting their part of the colossal war just ended was due largely to the spirit of co-operation engendered in the medical society of recent years. Long before our country entered the struggle organized medicine was quietly but surely clearing her decks for action. When the call came the response was prompt and effective as all the world now knows. In 1919 we face new and unsolved problems which only organized medicine has the power to cope with. It is our duty to mold the relationship of the individual physician to state medicine in all its unfolding ramifications to a satisfactory status. We should see to it that no effort be spared to place the profession where it belongs socially, politically and financially. No one will do this for us, we must act for ourselves and act now.

ORIGINAL ARTICLES

ACUTE PERFORATIONS IN THE ABDOMEN

By A. E. Baker, M.D., Charleston, S.C.

THE question of acute perforation in the abdomen is an exceedingly important one because we are confronted with one of the most serious accidents that can happen to the patient. It is one in which the judgment exercised by the surgeon will probably determine whether that patient will live or die. There must not be any delay in arriving at a diagnosis because that patient must be operated on at once if he is to be saved.

We will consider first the spontaneous perforations of the stomach, duodenum, gall bladder and appendix, then the traumatic perforations of the intestines and the bladder.

The most common type of perforation, except the appendix, is that of the duodenum. If we compare the results of perforations of the duodenum with the perforations of the stomach we find that those of the duodenum are often followed by recovery because of the relatively sterile contents and small amount of leakage as contrasted with that of the stomach. Also the duodenum is so closely surrounded by the gall bladder, the liver and the transverse colon, all of which aid in Nature's effort to plug the leak and to circumscribe the area of infection; but when we come to the stomach with its large contents and the absence of any organ close to it, ex-

cept the pancreas on the posterior wall, we find that free perforation of the stomach into the general peritoneal cavity is more fatal because a much larger quantity of material escapes.

Perforation of a diseased gall bladder is one of the most fatal of the various forms of perforation. This is because the large majority of the patients, who have perforation of the gall bladder, have had previous attacks of gall stone colics, and as a rule will not be operated on for four or five days, feeling certain that the condition is nothing more than that of previous attacks. Two cases of acute perforation of the gall bladder into the general peritoneal cavity have recently come under my observation. The diagnosis was verified at the time of operation. General peritonitis rapidly developed with fatal termination. Both of these cases had had previous gall bladder attacks and expected to get the usual relief.

Several cases of gun shot perforations of the gall bladder have occurred in my surgical service at Roper Hospital. In each case bile was free in the general peritoneal cavity. In those cases where the bile was from healthy gall bladders, it was sterile, no damage being sustained by the peritoneum. But in those cases in which the bile was not sterile peritonitis soon developed.

Traumatic perforations of any viscera in the abdominal cavity from gun shot wound or any other cause, do not give any symptom or combination of symptoms sufficiently constant to indicate the nature of the injury or to serve as a basis for diagnosis. Explor-

ation is the only definite means we have for making a diagnosis in time to save the patient. There is no harm done to go in and look, in the absence of symptoms. But to wait for symptoms is fatal to the patient.

Our experience in surgery has been that the patients with perforation operated on within the first eight hours have nearly all recovered. Just the reverse in late operations, they nearly all die.

How are we going to know whether or not perforation has occurred? This is really deciding the most difficult feature of the entire problem. There is one symptom in common with all of these cases which I believe will be of great assistance to us in making up our minds whether or not a patient should be operated on, that symptom is muscular rigidity. You will remember that the symptoms of perforation are first, in sudden attack of pain, the faintness, nausea and vomiting and the muscular rigidity. Not infrequently there is quite an improvement which comes on after the initial pain and shock caused by the perforation, and in a few hours the patient feeling relieved says, "Now I feel alright." But is he alright? How can you tell? **Has he muscular rigidity?** If he is alright there should be no muscular rigidity. Any patient who continues to have muscular rigidity after the relief of the pain should be operated on, basing the decision on the symptom of muscular rigidity. This is the one symptom which tells us whether the patient has perforation and whether or not he should be operated on. However in connection with perforations of the bladder I had one patient with intra-peritoneal perforation of the bladder, with fully three quarts of urine free in the abdominal cavity. In that the urine was sterile there was no

peritonitis and in this case there was no muscular rigidity.

Many of you may remember the great Swedish surgeon, Lennander, and his work on the sensitiveness of the peritoneum. He pointed out the fact that the parietal layer is the more sensitive, but the visceral peritoneum is insensitive. In a great measure this readily explains the causation of this most reliable symptom — muscular rigidity.

Discussion

Dr. R. Lee Sanders, Memphis, Tenn.

I have enjoyed Dr. Baker's paper very much and think it is on a very timely subject. I appreciated the way in which he presented it.

The subject of perforation of any intra-abdominal viscera is usually a serious matter, whether the perforation be spontaneous or otherwise. Very fortunately perforations of the duodenum are often protected. It is quite a common observation during operations for duodenal ulcer to see the former perforations protected by omentum or other surrounding tissue. I remember seeing an operation where the perforation took place just as the abdomen was opened and the duodenal contents squirted out; but in this instance there was no effort on the part of nature to protect it. The opening was closed, a posterior gastro-enterostomy was done, and the patient made an uneventful recovery. Therefore, since so many of the duodenal perforations are protected, not all of them require immediate operation.

Dr. Baker has called attention to the fact that gastric perforations are more serious than duodenal. I think this is quite a common observation among surgeons and is very true.

In former days the abdomen was opened on account of severe pain, a

muscle-splitting incision being made. (And this gives me an opportunity to speak of the McBurney incision, especially in adults in the ulcer age. I do not think we are ever justified in making such an incision, because of one's inability to explore other organs through it). It is a common observation to see patients who have been operated on for appendicitis when the condition was really a perforated ulcer.

What shall we do with the unprotected ulcer? If the patient's condition will permit, I think it is wise to close the perforation, cover it over with a little fat, and do a posterior gastro-enterostomy. Dr. Baker called attention to the fact that the stomach is so situated that it is not favored by adjoining organs to protect the perforations as much so as the duodenum. It is true that the contents of the stomach and duodenum are relatively sterile, but unless the quantity spilled is very small, and the opening immediately plugged, a peritonitis will usually end the scene unless operated upon. During operations for resection of the stomach and gastro-enterostomy, one often spills great quantities of material, but rarely ever sees trouble come from it.

The question of perforations of the gall bladder is often serious, but one frequently sees in pathological conditions large perforations posteriorly into the substance of the liver, and the patient is no worse on account of this accident. It is so perfectly walled off that the general peritoneal cavity is thoroughly protected. If, however, the perforation should occur anteriorly into the peritoneal cavity, it becomes a more serious matter; but even then one occasionally sees following perforations a large abscess form with bulging toward the surface which can be opened and drained and still the peri-

toneal cavity not be invaded. Let me repeat that I think the subject of perforations a very timely one, and one that requires a great deal of thought, and the very best of surgical judgment and skill to handle it properly. The differential diagnosis is exceedingly important and Dr. Baker has called attention to the marked muscular rigidity associated with a severe pain. These two symptoms taken together should weigh very heavily on the side of perforations. Then with a properly placed incision, one can usually clear up the diagnosis with ease.

Dr. Baker Closes

I want to thank Dr. Saunders for so ably discussing the paper.

I would like to emphasize one point: Whenever you have a gun shot wound or bullet wound, supposedly entering the abdominal cavity, you do not wait for symptoms, but always go in. I neglected to say of that patient I mentioned, who received a blow over the abdomen, we went in because of rigidity. There was at least a quart of blood in the free abdomen. There were no symptoms to guide us except the rigidity. Of course, in a few hours he would have had marked symptoms.

APPRECIATION

Dr. H. E. McConnell

By Wm. R. Wallace, M.D., Chester, S.C.

IN the passing of Dr. H. E. McConnell, of Chester, a most unique figure has been lost to our profession. For many years he has been a familiar attendant upon our various

medical meetings of the South. He was always deeply interested in the achievement of medical science, always the same jovial, big hearted fellow, yet in his modesty he never aspired to places of honor but was content to spend his activities in the rank and file.

He came into the profession during the formative period and growing up with the wonderful advancements of the past quarter century, in his many and varied activities, he gained a wonderful store of knowledge of medicine in general. Being of untiring energy he worked almost incessantly and touched society at all points as he numbered among his clientele the rich and the poor, the educated and the ignorant.

Dr. McConnell was always very jealous of the relation between himself and his patient and the only harsh words he was ever heard to speak about another fellow practitioner was when he thought this relationship was interferred with by the violation of the strict ethical code he observed. No one was willing to do more for a critical patient than he. If it were nursing or hospital care that was needed he left no stone unturned to procure these. If it were nourishment that was needed he often supplied this from his own home. If a consultation could possibly be of any benefit he was ready and quick to ask it.

In his manner he was open and frank and at times almost to the point of brusqueness. There was no camouflage with him. Personally he was honest and frank; he expected others to be the same with him. Some of his closest and most devoted patients say that they were almost estranged from him at first by his plain advice and his plain direct criticisms of their habits and surroundings.

The motive that was prominent in Dr.

McConnell's life was unselfishness. He seemed to have seldom looked at a question from the standpoint of policy, for whatever was right and for the public good was the side he took whether it meant gain or loss to him personally.

Dr. McConnell always took an interest in the young doctor. He often said that he expected to stay young and to get young ideas by association with the young members of the profession. It was always his custom when some of his young acquaintances returned from the medical colleges and hospitals to quiz them upon the new theories of the day and then to take them with him to see a large group of interesting cases he always had on his list. Then, too, he always sought an opportunity to assist the new-comer in the profession to get work. He often furnished the young doctor with some of his first calls and the specialist and surgeon with some of their first cases.

As has been said before he was an enthusiastic advocate of newer methods in medicine along all lines. He was almost a fanatic on the subject of prophylaxis. When a case of small-pox or typhoid fever developed he never thought that he had finished his duty until every one in the surrounding neighborhood had been inoculated. He had the distinction of recognizing the first case of pellagra in this part of the country. Having read the symptomatology in a translation from a foreign medical journal, he recognized a case in his practice and reported it to his medical friends here in Chester but never suspecting that it should become so prevalent in America he did not call special attention to it until other cases were reported.

The greatest heritage left by Dr. McConnell was his great good name.

Many are widows, orphans and others in distressed circumstances who will for years rise up to call him blessed. While he enjoyed the ordinary comforts of life and left his family a liberal competency he never amassed

the wealth his practice justified. But after all, a good name that shall live in fond remembrance in many a heart is more enduring and more to be desired than great wealth or fame.

— SOCIETY REPORTS —

IN MEMORIAM

Be It Resolved by the Chester County Medical Society:

That in the death of Dr. H. E. McConnell this Society has lost one of its most zealous and faithful members. Since its organization this Society has been benefitted by his wise counsel, his regular attendance upon the meetings, and his guidance in the various offices he has filled with success.

That the profession has lost one of its most unique figures. Dr. McConnell in his many and varied activities retained many of the endearing charms of the old family doctor, yet was always an early and enthusiastic supporter of every new advancement in the medical science. While not a

speaker and, therefore, not taking a conspicuous part in medical meetings, yet the societies to which he belonged never had a more faithful member.

That we wish to express to those who have been bereft our tenderest sympathy and to indulge the firm conviction that his memory will be kept alive in the most kindly sentiment by every member of this Society.

Be it further resolved that a page of the minute book be inscribed to his memory, that a copy of these resolutions be sent to the bereaved family, and that they be published in the local papers and in our State journal.

W. R. Wallace,
W. B. Cox,
W. M. Love,
Committee.

SUBSCRIPTION RATES OF THE STATE

Effective October 1st, 1918, the subscription rates of 'The State' will be as follows:

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ABSTRACTS

STERILIZING THE NASOPHARYNX

Evidence is accumulating of the value of Dakin's antiseptics for sterilizing the throat and nose of persons exposed to or suffering from Spanish influenza and other diseases transmitted by the secretions of the upper respiratory tract. The simplest and most convenient of these remedies to use is Chlorazene, which is available in tablet form for the preparation of aqueous solutions, which may be used for spraying or gargling. Such solutions are convenient, can be made up by anyone with ordinary intelligence, and are exceedingly efficient.

When possible the aqueous solution should be supplemented by the oil spray of Dichloramine-T dissolved in Chloreosane, a 1- to 2-per cent solution being employed for this purpose. This should be applied at least twice daily, where possible by the physician himself or by the nurse. The use of Dichloramine-T assures prolonged contact with the mucous membrane of an exceedingly powerful germicide, which can be used without danger to the patient.

The extensive experimental work conducted by the Abbott Laboratories, preliminary to placing the Dakin products at the disposal of American physicians, seems to be justified by the splendid results which are being obtained.

FOR BETTER RURAL HEALTH

Much remains to be done in rural districts, according to the annual report of the Secretary of Agriculture,

to control such pests as mosquitoes and the hookworm, to eliminate the sources of typhoid fever, and, even more, to give the country districts the advantage of modern hospitals, nursing and specialized medical practice.

Noting that many agencies, some of them private enterprises with large funds, are working for improvement, the report says that the Department of Agriculture, through its home demonstration service, is giving valuable aid, and the public health service is increasingly extending its functions.

To what extent the further projection of effort is a matter for State or local action remains to be determined, says the Secretary, but it seems clear that there should be no cessation of activities until there has been completed in every rural community of the Union an effective sanitary service and, through the provision of adequate machinery, steps taken to control and eliminate the sources of disease and to provide the necessary modern medical facilities, easily accessible to the mass of the people.

EVERY DOCTOR IN THE UNITED STATES, should be interested in encouraging American manufacture of typically American medical products. Let us, by enthusiastic patronage of all-American manufacturers, so firmly establish the American supremacy in this field that there will never be the slightest danger of its passing back to Germany.

One typically American invention is the new wax-impregnated open-mesh lace dressing for wounds, burns,

bruises, etc., which bids fair to revolutionize the present-day dressing methods.

Careful tests in large industrial hospitals show that by using this lace mesh, 50% to 75% of the gauze, absorbent cotton, and roller bandages may be saved, as well as hours of the time of surgeons and nurses, not to mention the saving of agony to the patient experienced in the removal of the old sticking, secretion stiffened pad of dressings, for this remarkable dressing DOES NOT STICK.

Just by way of introduction, THE ABBOTT LABORATORIES, Chicago, Ill., who make this Parresined Lace-Mesh Surgical Dressing offer a special outfit containing a box of six envelopes of the Lace-Mesh, an ounce of Dakin's Dichloramine-T, and four ounces of Chloreosane—the solvent for Dichloramine-T,—prepaid to any point in the United States for only \$2.50. They include, without charge, in the shipment, a trial bottle of Chlorazene, Dakin's water-soluble, stable antiseptic, and one of Digipoten, a typically American digitalis preparation, which leaves no excuse for using the German. Send for this package today, Doctor. It has the ABBOTT guarantee of purity and accuracy.

CALCREOSE

Calcreose is a creosote product, made in the United States of America by an American manufacturer. Clinicians have used it with good results in the treatment of all forms of bronchitis and especially the bronchitis accompanying pulmonary tuberculosis. It has been taken for long periods of time, and in large doses, without causing gastric irritation or discomfort; no burning; no nausea. Calcreose is also valuable in gastro-intestinal infections. In-

identally, the price of this product is far below that of other creosote products of foreign manufacture. The booklet "Calcreose Therapeutics" which contains all information as to indications, dosage and method of administration, may be obtained by writing to The Maltbie Chemical Co., Newark, N. J.

YEAST CAKE A DAY WILL KEEP INFLUENZA AWAY

The use of yeast as a preventive against and cure for Spanish influenza is suggested by Dr. Frederick H. Knoff, a leading specialist of diseases of the lungs and physician to the Tuberculosis clinic.

Yeast, Dr. Knoff said, has been used with success for many years in the treatment of acute bronchitis, diseases of the skin and gastro-intestinal diseases. He advises people to eat three yeast cakes, one with each meal.

The free use of yeast, the doctor claims, will ward off possible attack of influenza. The product increases the white blood corpuscles, which attack the disease, and thereby adds to the power of resistance in the body, Dr. Knoff explained.

Many Doctors Use It

"Many doctors here and elsewhere are administering yeast in treating various infectious diseases," Dr. Knoff said, "and report exceptional results.

"There are many physicians who eat yeast with each meal while treating infectious diseases. Some, whose duties bring them in contact with infectious diseases at intervals, remain on the yeast diet throughout the year. The number of doctors who do this is greater than the public appreciates.

Success Abroad

"Records show that yeast has been used with success in previous epidemics of influenza here and abroad and it seems that if it were to be administered freely in the present epidemic conditions would soon be remedied.

"Spanish influenza, which is ordinarily prevalent in young adults, makes its appearance almost annually in Germany during June and July. Spain experiences an epidemic of the disease practically each year during the months of July and August, at which times about thirty per cent of the population is affected," Dr. Knoff said.

REGISTER YOUR BIRTHS

In New York City in 1905, there were two thousand eight hundred and two (2,802) certified copies of record of births issued for legal purposes, and in addition there were forty-eight thousand five hundred (48,500) free statements issued as to date of birth for school and employment purposes.

In 1913 there were fifteen thousand four hundred and ninety-five (15,495) searches of the birth records made and one hundred and twenty-three thousand, three hundred and forty-seven (123,347) free statements issued for school and employment purposes. That is to say, the birth records on file in New York City helped to enforce the personal or property rights of one hundred and thirty-eight thousand eight hundred and forty-two (138,842) persons in 1913. This illustrates the importance of birth registration.

The profession will no doubt be interested in the recent announcement of The Owl Drug Co. stating that beginning December 1st, no preparations for the self-treatment of venereal dis-

eases will be sold in the 29 retail stores of the company, located on the Pacific Coast and in the Middle West.

When such preparations are called for, the salesman is instructed to explain the new policy of the company and give the customer a carefully prepared confidential circular, which explains the seriousness of all venereal diseases and the importance of consulting a reliable physician and a list of such will be furnished upon request.

Standard preparations, recognized by the profession will be carried in the prescription room and sold only upon orders from a physician.

Some weeks previous to this announcement the laboratories of The Owl Drug Co. discontinued the manufacture of several preparations for self-treatment.

This innovation was decided upon after the management gave due consideration to the report of the Surgeon General of the U. S. Army showing an alarming prevalence of venereal diseases among the civilians who were examined preparatory to entering the army.

The action of other druggists will be awaited with interest.

ACNE ROSACEA AND ITS TREATMENT, WITH SPECIAL REFERENCE TO YEAST TREATMENT

A valuable addition to the treatment of acne rosacea is furnished in a remedy long employed against acne vulgaris—we refer to yeast, an agent well brought to the notice of the profession in an article by Hawk, Knowles, Rehfuss and Clarke (Jr. Amer. Med. Assn. Vol. LXIX, No. 15, Oct. 13, 1917, pp. 1243-1247). The novel part of the labor of these collaborators consists in their use not of brewers' yeast, which has long been

used in the treatment of furunculosis, acne, and allied conditions, but of the readily available ordinary yeast cake employed by housekeepers and by bakers (Fleischmann's Compressed Yeast). We quote from this article: "Bakers' yeast was found to be a useful remedy in the treatment of furunculosis, *aene vulgaris*, acne rosacea, constipation and in certain other cutaneous and gastro-intestinal conditions. . . . Of eight cases of *aene rosacea*, all patients were improved or cured. . . . We consider that yeast is fully as successful as any other remedy in furunculosis, *aene vulgaris* and *aene rosacea*." When we consider that at least one of the authors named is a dermatologist of standing, there is reason for our applying to practice the data of the article with added confidence, especially when we consider that as yet we have in the treatment of *aene rosacea* no remedy that acts as a specific.

It is to be remembered that *aene rosacea* consists in the superaddition of an *aene* to a *rosacea* or a more or less lasting flushing of specific areas of the face. At first transient, the flush becomes permanent and is associated with dilatation of the capillaries and small blood-vessels of the area affected, giving rise when the nose is the region involved to the so-called "grog-blossom." A further stage consists in the thickening of the connective tissue and the formation of irregularly shaped masses, which convert the nose when it is the part involved in what is known as "rhinophyma."

We should remember that although alcohol is regarded by the laity as the cause of the condition, such is not always the case. Alcoholic beverages, however, as well as the ingestion of tea and coffee, highly stimulating or well-seasoned food, constant exposure

to heat or to cold, may play a part in the causation, especially in the causation of the initial flushing. The use of tobacco may have something to do with the bringing-on of the condition. The use of tight clothing, such as collars and corsets, may also play a part. In women, the condition may be associated with uterine disorders. Very many of the cases are associated with gastro-intestinal disorders, especially constipation, conditions in which yeast is a peculiarly helpful agent.

It is well known that yeast is of great value in the treatment of ordinary *aene*. The *aene* lesions of *aene rosacea* are practically identical with those of *aene vulgaris*, except that the association with comedones is not as well marked, and the lesions do not form around comedones. (See Haven, Diseases of the Skin, 1915). The condition may be associated with seborrhea eleosa. There are scarcely any subjective symptoms. The patients affected with *aene rosacea* are usually of middle or late adult life, older, as a class, than those affected with *aene vulgaris*.

Deformity due to advanced rhinophyma is best treated by means of surgical operation, by means of which redundant tissue is removed. Carbon dioxide snow may be used to remove small redundancies of tissue. In another class of cases, the Rosentgen-rays are of value in the treatment, or such agents as the Finsen light (or some equivalent for it), the quartz lamp, etc. Cases associated with dilatation of the capillaries and small vessels which fail to respond to other treatment may be treated by searification or by electrolysis. Sulphur or resorcin in various preparations, or lotia alba in strength sufficient to keep the skin dry and slightly desquamating may be applied locally.

Vleminckx's solution, at first weak, and then increased in strength, as employed in ordinary acne, may be used. Drew (Monatshefte fur praktische Dermatologie; Vol. LII, No. 7: April 1, 1911; pp. 349-365) recommends in this condition the use externally of a soap containing yeast. While such a soap is as a rule unavailable, yeast may readily be incorporated into pastes, etc., and used locally, not only in acne rosacea, but also in acne vulgaris, furunculosis, and other purulent dermatoses.

If, however, we are to judge of the work of Hawk and his collaborators (loc. cit), the external use of various medicaments would seem well-nigh superfluous. The cases of acne rosacea treated by them by yeast alone, with no external treatment mentioned other than boric acid, varied in duration from two to fifteen years. The lesions improved wonderfully or disappeared altogether, papules and redness went away in at most four weeks, often ten days to two weeks, about three yeast cakes being taken a day.

Of course, cases of acne rosacea should be treated symptomatically, all sources of irritation should be removed, and causative factors such as uterine disorders remedied. The alleged good effects of ichthylol internally, however, which is recommended by some dermatologists, are not acknowledged by all.

DELAYED TETANUS

W. L. Whittemore, Shorncliffe, Kent, England (Journal A. M. A., Dec. 14, 1918, reports two cases of tetanus, in which after apparent recovery there occurred, at a later date, similar though milder attacks of the same disease. These men were wounded, one three and one-half months before

the onset, and the other nine months previous. In the second case, three months after the original wound was received, an operation was performed in the neighborhood of the healed wound which may have caused an earlier appearance of the disease. In both, local symptoms and signs appeared two and three weeks before the secondary generalized disease. Both patients were treated with anti-tetanus inoculations, both shortly after the original wound, and during the attack. Eye symptoms were present in both cases, and in one a bad keratitis, in the other iritis and conjunctivitis. Whittemore concludes from these cases that the incidence of traumatic tetanus may be markedly delayed, and that relapses may occur after such attacks. The premonitory symptoms are localized in the neighborhood of the wound. The relapses are not so long or severe as the original delayed attack, which may be followed by muscular symptoms for weeks and months, and these cases raise the question whether excision of the foens may not be advisable, even when there is no foreign body included, as a precautionary measure against tetanus.

RECTAL CANCER

J. R. Pennington, Chicago (Journal A. M. A., Dec. 7, 1918), says the only plan at present that offers any hope of a cure of cancer is the use of the knife, and the relief is then often only temporary. Radium is of little use in columnar-celled growths, the form which principally affects the lower bowel. Pennington thinks the evidence as to its value in such cases is insufficient. The operative mortality with the knife is high. The case is usually advanced, requiring extensive dissections, and hence there is consid-

erable shock. Another important factor is sepsis. The proportion of cases judged suitable for operation at the Mayo clinic steadily increased, and in the period from 1913 to 1915 it was raised to 71.8 per cent, while the mortality was lessened. The inoperability of cases of rectal cancer extending to **contagious structures** is no longer admitted there. In a number of cases operations much extended beyond the rectum were performed. A three-year survival following operation is no longer deemed a cure, and the proportion of survivals for three years is not great. While the old operation of Lissfranc has given good results in some cases, still the method of choice is the combined or abdominoperineal route, as it alone affords free access, enables the surgeon to go well beyond the tumor mass. As regards metastases, the rectal statistics are about the same as with other forms and locations of cancer, it being frequently fatal without evidence of metastases. It is a well recognized procedure to begin the operation from above, and work down against the lymph current, as in the case of cancer of the breast, and this can be done for the rectal cancer only by the abdominoperineal method. If there is any cancer higher up, as sometimes occurs, it can also be detected. Other points in its favor are mentioned by Pennington, and he repeats his suggestion of the advantages of periodical examination of persons reaching the cancerous age, not necessarily of the rectum alone but in women of the uterus and breast also. The responsibility of the family physician in this matter is great, and he should carefully avoid any perfunctory diagnosis of "piles" and an equally perfunctory prescription of ointments. A proctoscope is necessary for the diagnosis, and a consultation with a specialist

possessing the proper facilities is essential in cases of doubt. The surgeon should also give special attention to avoidance of recurrence and should resort to only such procedures as leave a minimum of scar tissue.

VALUE OF BLOOD UREA

A. E. Goldstein, Baltimore (*Journal Accidents occurring during "stunt A. M. A.*, Dec. 14, 1918), reviews the literature of the blood urea test for the diagnosis of urologic conditions, and reports his own investigations, carried out practically along the same lines as those of Scherek and Gradwohl, the principal retention test employed being that of blood urea. Goldstein says that for the purposes of comparison and to demonstrate the value of this test in diagnosis and prognosis he has also employed the three following tests: (1) the urine test; (2) the phenolsulphonephthalein test, and (3) the ordinary chemical three following tests: (1) the urine urea (albumin, casts, etc.). The article is a lengthy one, for abstracting in detail, but the conclusions reached are substantially as follows: In blood urea we have a valuable retention test for the diagnosis and prognosis of urologic cases applicable to all. As a prognostic agent it is practically infallible. It is a simple procedure and can be used when other excretory tests, such as phenolsulphonephthalein, urine urea, etc., fail. When relative kidney function is desired, it should be used together with the excretory test. In a case of more than 1 gm. of blood urea per liter of blood, the prognosis should be considered grave and when less than 0.75 gm. as good. An oncoming uremia can be diagnosed long before the clinical signs appear, and before the excretory tests can give the infor-

mation. Goldstein holds that its more general employment will decrease the percentage of mortality of the urologist and general surgeon. Three tables accompany the paper.

TRIGEMINAL NEURALGIA

H. H. Martin, Savannah, Ga. (*Journal A. M. A.*, Dec. 14, 1918), holds that the injection of the ganglion of Gasser through the foramen ovale for the relief of trigeminal neuralgia will be eventually accepted as the operation of election. It is, of course, a delicate operation, and if improperly directed, the needle may enter the foramen spinosum, the jugular foramen, or an anomalous foramen transmitting an emissary vein known as the foramen Civinini, occasionally found just below the foramen ovale. If passed too far through the foramen ovale injury is possible to the cavernous sinus or even the internal carotid. But all such accidents, however, can be guarded against, and the procedure, though formidable, is not so much so as gasserectomy, and gives equal relief without causing such bad results as may follow the other methods. The indications are the same as those for gasserectomy, and there are no serious contraindications. It is Martin's opinion, that surgical methods should be abandoned in favor of the direct injection of chemical numbing agents, and of these alcohol is the best adapted. The technic of the operation is simple but the ability to locate and enter the foramen ovale is obtained only by extensive and patient trial on the cadaver. If the pain is limited to the area supplied by the third branch only, the injection may be limited to this branch, but if the first or second branches are involved the needle should be inserted into the body of the

ganglion until the sensory root is reached. The only serious disadvantage involved is a neuroparalytic keratitis which he has seen in about 30 per cent of all successful injections. This, in most instances, recovers in due time without injury to the eye. Martin quotes at some length from Wilfred Harris of London, as setting forth some essential facts, but embodying some conclusions with which he does not agree, such as Harris' view of the need of sewing up the eyelids to avoid the keratitis, and his advice as to a shallow injection of the ganglion. The details of the technic are described. The author uses as a preliminary an injection of 0.5 per cent solution of cocaine or a 2 per cent solution of procaine. The immediate results of a deep injection, as advocated by Martin, are anaesthesia of the entire area of the fifth nerve territory, persisting for a variable time and an analgesia which in a great majority of cases is permanent. Seven cases are reported and the article is illustrated.

GLAUCOMA

A. E. Ewing, St. Louis (*Journal A. M. A.*, Dec. 14, 1918), fully reports a case of glaucoma which was treated with repeated postciliary trephining operations. The result was not good, as it left a blind eye, but the process, as used, demonstrated that the removal of vitreous to the extent that the tension is far below normal is no more a cure for glaucoma than is the removal of the lens. Drainage may be established by way of the vitreous chamber. A trephined wound in the sclera is closed by newly formed fibrous tissue, in the same manner as a trephined wound in the sclerocorneal margin, and is no more dangerous. The clouding of the cornea and vitreous,

and the pulsation on the disk may be instantly relieved by vitreous drainage with immediate restoration of vision. The full feeling and pain of glaucoma are relieved by scleroconjunctival trephining, even though the choroid is not disturbed and there is no apparent lowering of tension. The lens is not affected by the operation, and there need be no visible operative defect. Miotics are of as great value following the operation as before it.

INFLUENZA VACCINE

H. L. Barnes, Wallum Lake, R. I. (Journal A. M. A., Dec. 7, 1918), reports his experience with the influenza vaccine furnished by Dr. Timothy Leary of the Tuft's College Medical School, at the Wallum Lake Sanatorium. The epidemic attacked the institution early in October and spread throughout the population, till there had been a total of eighty-two cases, or 25 per cent of the total population. Counting all cases that occurred both before and after vaccination, forty-five, or 40 per cent developed influenza. In computing the incidence of the disease for comparison between vaccinated and unvaccinated, no cases were counted that developed before the vaccine was given and no patient counted as vaccinated until he had received the three doses. Before the arrival of the vaccine eight cases that terminated fatally, had developed. Deducting children who were quarantined and so far as known not exposed, the influenza incidence was 20 per cent. The conclusion reached is that the morbidity was only slightly lower among the vaccinated, and the mortality from influenza was practically the same among vaccinated and unvaccinated patients.

COMPLETE ROENTGEN STUDY IN ABDOMINAL DISEASE

G. E. Pfahler, Philadelphia (Journal A. M. A., Dec. 14, 1918), insists on the importance of a complete roentgen study in obscure gastro-intestinal disorders. The investigation should include everything from the stomach and gallbladder to the rectum, and if the spinal column and sacro-iliac region or the kidneys, ureters and bladder are to be studied, it should be done before the study of the gastro-intestinal tract and while the stomach and bowels are empty. All this requires time and it is Pfahler's custom to allow at least forty-eight hours in every case. The study of the organs must be intensive and Pfahler gives the signs, both fluoroscopic and with plates, of all abnormal conditions and how they should be estimated, especially noting the diagnostic features of the appendix and cecal regions and of the ascending colon. He believes that chronic appendicitis causes more obscure abdominal conditions than any other disorder, and yet gives the most elusive evidence on which to base a diagnosis. The study of the abdominal organs should determine whether they are normal or abnormal, and if abnormal, the nature of the abnormality should be described. Cancer, if present, may always be recognized, and its absence may generally be proved. Gastric ulcer may be recognized in 90 per cent of the cases and duodenal ulcer in probably 95 per cent. Gallstones may be recognized in approximately 50 per cent, and other evidence of gallbladder disease in another 25 per cent. The diagnosis of chronic appendicitis may be made in practically all cases, and it is only the roentgen study that will determine the presence of incompetence of the iliocecal valve. At times the ro-

entgen ray is better than exploratory operation for showing defects, adhesions and abnormal function, and it alone can determine the presence of diverticulitis. Cancer of the rectum in some cases can be better studied in this way than by proctoscopic methods. The appearances in nearly all conditions concerned are pointed out in detail.

THE EAR IN AVIATION

Accidents occurring during "stunt flying" and their causes are the subject of an article by Lewis Fisher (Philadelphia) and H. W. Lyman (St. Louis), Mineola, L. I., N. Y. (Journal A. M. A., Dec. 14, 1918). Something gone wrong with the pilot is the usual cause, but just what that is, is not always clear. Poor judgment, carelessness, "stunting" at low altitudes and sudden faintness are the usual explanations, but underlying all there is a history of momentary loss to faculties resulting in failure in manipulating the controls. So many of the accounts emphasize vertigo as a cause, that the subject has been investigated at Mineola, and experiments involved causing dizziness indicate clearly that "stunt flying" is essentially an ear problem. Fisher and Lyman describe the equilibrating apparatus of the ear, and the mechanism of the production of dizziness. While vertigo is produced by the auditory apparatus under certain conditions, a vertigo immunity from their absence would be too great a handicap, especially since the normal individual can overcome, largely at least, the vertigo-producing conditions in flying. There are three cardinal planes of vertigo; horizontal, frontal and sagittal. A sense of being turned in a horizontal plane—horizontal vertigo—is less disturbing than that

of being whirled in a vertical plane—vertical vertigo. Each semicircular canal if stimulated produced a vertigo in its own plane, hence in the upright position stimulation of the horizontal canals is less disturbing. When the vertigo is induced in the vertical canals the effects can be greatly ameliorated by bringing these canals into a horizontal position, which is easily done by tipping the head forward. All types of vertigo, however induced, are made less and less disturbing by frequent repetition. The practical application of these facts to the various "stunts," the tail-spin, tight spiral, loop, and the Immelmann turn and other maneuvers and the correction of the various vertigos produced, is explained in detail with illustrations. The experienced flyer in his preliminary practice learns how to avoid vertigo, but an understanding of these principles might help him under circumstances such as might occur in actual combat. "As a matter of fact, stunt fliers develop instinctively certain maneuvers that neutralize vertigo; thus one flier found by practical experience that by leaning as far forward as possible, so that his head was practically inverted, a tail spin gave him practically no disabling vertigo. Another found that going into a straight nose dive immediately following a tail spin saved him from any uncomfortable dizziness." While the fliers have instinctively adopted methods of keeping the vertigo in the horizontal plane, the knowledge of the principles involved is of great value to the aviator, as he may be enabled to disregard vertigo effects in his laboratory training to a degree impracticable in the air. An apparatus for this instruction is afforded by the orientator, which is constructed like the cockpit of an aeroplane suspended in concentric rings or gimbals like a

ship's compass. All the movements and changes can be performed except the actual forward projection, such as the loop, spiral, etc., under any speed, by the individual seated in the machine.

STATIC DEFECTS OF THE FEET

E. A. Rieh, Washington, D. C., (*Journal A. M. A.*, Dec. 14, 1918), says that surgery in foot defects was properly prohibited in the training camps, and he emphasizes the use of correct shoe mechanics in their treatment. A certain shoe properly selected may be considered normal, but an abnormally deformed foot demands an abnormal and non-standard shoe. The two infallible aids in diagnosis of foot defects are the pedograph and the arch scale for the scaphoid. They supplement each other, and neither is of much use alone. The pedograph is merely an imprint on paper of the weight-bearing surface of the foot, surrounded by a pencil contour of the upper foot, and he points out the method of its use, illustrated by a very large number of figures showing its application to various defects. His summary of the treatment and his conclusions are given as follows: "Cavus of the first, second or third degree calls for a rocker shank, size A, B or C. Ankle valgus of the first, second or third degree calls for a tomahawk wedge, thin medium or thick. Flat-foot of the first, second or third degree call for tomahawk wedges, thin, medium or thick, foreible correction, and temporary felt support. Anterior arch defects, metatarsalia, Morton's neuralgia, and anterior callosities call for anterior heels, size 1, 2 or 3. The width should be specified. The more experienced the worker in shoe alterations, the less adjuvant treatment usually is necessary

to secure results. Mechanical care and skill are mightily important in every alteration, and the alteration is liable to fail with careless, indifferent workers. It must not be surmised that even the experienced do not have to change, raise, lower or alter the positions of their inserts. One of the oldest surgeons often has to revise his prescription as many as three or four times in difficult compound cases before hitting the right combination. The novice, the careless and those not mechanically inclined do not achieve standard results."

DRAINAGE OF CHEST WOUNDS

M. A. Blankenhorn (Orville, O.), Francee (*Journal A. M. A.*, Dec. 14, 1918), remarks on the difficulties caused by open pneumo-thorax in drainage of chest wounds, especially in those inflicted in war. Patients operated on early and left with open drainage have always done badly, and those not operated on have developed empyema or become septic. Patients operated on at a selected time and closed again have done well, but it is not always possible to provide operation and closure at the critical hour, and many cases are seen, especially at the base, which demand drainage. In such a case the pleural membrane, respiration and circulation are relatively normal, but when an open pneumothorax is produced, it exposes to infection, and impaired respiration and circulation render the situation more serious. It is certain that the pleural membranes when approximated resist infection better than when separated. Mechanical difficulties have been the greatest obstacles in the way of closed drainage. The trouble is usually in making an anastomosis between a rubber tube and the chest wall. At the Lakeside

Unit they have used the Brewer tube with very satisfactory results. It is a rubber tube with flange arrangements to be inserted through a rib that has been resected from $\frac{1}{2}$ to $\frac{3}{4}$ of an inch. "It is not necessary to suture the tissues tightly around the tube, for an air tight junction can be made with adhesive tape and dressings together with the flanges of the tube. To maintain a continuous negative pressure on the chest, a stiff rubber bulb is collapsed and connected to the free end of the tube by a glass connection. In civil practice we were using Politzer bags, but at present the rubber bulbs of automobile horns are more available. At operation the surgeon can usually insert the tube through his stab wound with very little inrush of air and by manipulating the flanges of the tube prevent a pneumothorax of any appreciable size from forming. What air has entered the chest can be promptly pumped out with the bulb, a large surgical clamp on the tube being used as a valve. By keeping the bulb collapsed and dependent below the wound . . . one can make the lung expand normally and at the same time provide a liberal drainage of the pleural sinus." The lung was found to come down very readily and breath sounds were audible almost at once over the space once occupied by fluid. In all cases the tube remains tightly in place for five days at least, and the lung adherent to the chest wall thus preventing pneumothorax. After the second or third day irrigations at low pressure can be made through the tube, being careful not to tear the lung from its new adhesions, and coughing should be prevented for the first five days. When the chest has been explored for a foreign body and drainage is found necessary it is best to make it through a separate opening, especially

if there is contamination of the surgical wound by the wound of entry. In chronic empyemas after gunshot wound, or when there has been considerable fibrosis of the visceral pleura, a system of closed drainage with suction will expand the lung better than blowing exercises, but the methods can be combined. In chronic cases where granulations have formed around the wound, the tube can be removed, cleaned and replaced, and an air tight junction made again with the help of adhesive tape.

EMPYEMA CAVITIES

Two laboratory methods should guide the surgical treatment of chronic empyema cavities, says F. A. Steveus (Boston), Biltmore, N. C. (Journal A. M. A., Dec. 14, 1918). The first, and relatively the most important, is the bacteriologic study of the discharge, and the second is a careful roentgenologic study of the existing pneumothorax. Proper correlation of these findings is necessary, however, and the knowledge gained by the roentgen ray is absolutely essential. It not only detects abnormalities in the lung tissue, but also shows the size, shape and location of the draining cavity, and affords some knowledge of its wall. A carefully standardized technie which is an accurate means of diagnosis, and not any time hurtful to the patient, is also an essential. Stereoscopic plates are obviously needed to locate points within the chest, but the interpretation of the various densities in a draining empyema is a far more difficult problem. While simple large cavities can be easily outlined, those of bizarre shape, with ramifications between and around the lobes, are much more difficult, and require complete filling of the cavity with a substance opaque to the

ray. A probe may be used to estimate the depth, but cannot demonstrate the lateral dimensions. There is no one method of introducing an opaque substance that meets all the requirements. Combinations of petrolatum and waxes, as a carrying medium especially with bismuth, have mechanical disadvantages and are too dangerous to the patient to be used for diagnostic purposes. Their drawbacks, however, are remedied by the use of fluid mediums. The solutions in common use are potassium iodid and thorium nitrate. While they fill the cavities alarming symptoms often occur from their absorption when used in large quantities. Potassium iodid is very irritating, and the pain experienced by the patients prohibits its routine use. Thorium nitrate does not produce such reaction, but even if chemically pure, chills, fever and hematuria are often observed from the use of large amounts. A proper material should be either a suspension of an insoluble substance or a colloid of some metal. Colloids are frequently difficult to prepare, and lack some advantages. Bismuth subnitrate, if left in the cavity indefinitely, may cause harmful effects, but not so if promptly removed. Its use should be permitted only in suspension in a liquid medium of sufficient body, and cotton-seed oil is recommended by the author with 20 per cent. bismuth subnitrate and 3 per cent. powdered acacia as meeting all requirements. The filling of an empyema cavity, according to the author, must be done so that the deepest portion of the cavity is in the most dependent positions. "The warm suspension of bismuth and oil is drawn into a sterile syringe and, without touching the wound at any time, is allowed to flow slowly down the walls of the cavity. This effects the

gradual displacement of the air from the deeper parts. Since most of the resections have been done posteriorly, the patient is laid across the table with his head and body hanging down, supported by an attendant. The quantity is recorded and more is allowed to run in until air bubbles no longer escape and breathing causes an overflow. Plates taken at this time show the cavity well filled, but the opening through the chest wall is not demonstrated. To overcome this the wound is tightly packed with narrow strips of gauze previously dipped in bismuth petrolatum paste and sterilized. The patient is carefully raised on the table face down, and exposure can then be made without loss of the mixture; the resulting shadow corresponds exactly to the cavity. As far as possible, all patients should be taken in the same position, so that the operator may become accustomed to the same chest markings. The head is turned to the left with the right cheek down; the hands are placed under the thighs with the elbows extending just off the table. In order that the cavity may not be abnormally distended, it is important that no pressure be used in the injection." After the first pair of plates is exposed the tampon is removed, and after draining out the bismuth suspension a second pair is taken with a thin film of bismuth still lining the cavity. Several illustrations showing the points mentioned, and the advantages of the bismuth method are included in the article.

RESPIRATORY DISEASE

The mortality rate during the respiratory disease epidemic in the cantonments and in general practice has been studied by V. G. Heiser, New

York (Journal A. M. A., Dec. 7, 1918). Within the space of a few weeks more deaths have occurred from an acute disease than have occurred on all the battlefields of any similar period, notwithstanding the millions of soldiers that have been lost in the present war. As regards the proportion of mortality of different ages and in the two sexes, Heiser finds that 50 per cent. of all deaths occurred between the ages of twenty-five and forty-five among the civilians of New York City, and similar figures are reported from other large places. Both sexes seem to have suffered alike and from these statistics we have already lost, it may be calculated, 50,000 men in the prime of life, a serious decrease in man power. Viewed from another standpoint, it is apparent that it is more dangerous to be a soldier in peace cantonments than to have been on the firing-line in France. The mortality in New York and Chicago shows a rate among soldiers double that among civilians, and as living conditions in the country approach those in the Army the mortality correspondingly increases. And, with few exceptions the mortality rate from influenza-pneumonia is in very close relationship to the number of persons housed and living under barrack conditions, with a capacity of from fifty to 150 men to a room. The death rate in the male age group of from twenty to thirty was seven per thousand, while the death rate among all ages in Boston from the beginning of the epidemic to November 2 was five per thousand. In the majority of Western cities the civil mortality has been much lower than in the large Eastern ones, while in many of the large Western cantonments the death rate was as high or higher than in the Eastern ones. In Chicago, the rate among the male-age-group of twenty to thirty

was four per thousand, or about one-third of the Army rate. The crowding in barracks as a cause of increased mortality seems to be demonstrated in the S. A. T. C. in various colleges, and Heiser points out as special examples of this the deaths among the vocational students in Wisconsin University in approved Army barracks as compared to the small percentage of mortality of those otherwise housed, and also at the University of Minnesota where similar conditions existed. It is proper to mention that the mortality was nil or very slight in some barracks of the S. A. T. C., but here pneumonia was usually not introduced. Tables are given showing the comparatively lower rate of civilians of large cities. Heiser summarizes the statistics and methods suggested for better conditions as follows: "1. Experience in this country since the war began has shown that soldiers who live under barrack conditions have a high morbidity and a particularly high mortality rate from respiratory disease. 2. The mortality rate among the Students' Army Training Corps in the recent outbreak of so-called influenza was higher than among students who lived under prewar conditions. 3. Civilians throughout the country had a much lower mortality rate than soldiers in cantonments and students in barracks at colleges and universities. 4. Other conditions being equal, the mortality was higher among groups of men who slept many in a room. There may have been other factors responsible than sleeping in the same room, as, for instance, infection through close contact at meals, infected mess kits and hand infections. 5. The high infectivity from respiratory disease at the present time makes it justifiable to require men to live under barrack conditions only in

cases of extreme emergency. 6. Patients with different respiratory infections should not be quartered in the same ward or room, even in the presence of heretofore accepted standards for ventilation. If emergency conditions make such a course necessary, patients and attendants should when practicable wear approved masks or be otherwise protected. 7. Finally, sanitary art has not arrived at the point at which it can adequately safeguard the lives of men against respiratory disease who live under barrack conditions."

The following are abstracts from editorials published in *The Journal of the American Medical Association* for December 7, 1918:

A SPANISH EDITION OF THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

In a communication to the Editor last March, President George E. Vincent, of the Rockefeller Foundation, suggested that the publication in Spanish of *The Journal of the American Medical Association*—thus making it available to our colleagues in Central and South America and elsewhere—would be a great achievement, for promoting both scientific medicine and better international relations. The subject was brought before the Board of Trustees of the American Medical Association at the meeting in Chicago last June. The Board gave the matter very favorable preliminary consideration, and ordered that an investigation be made and further facts presented, so that final action might be taken at a later meeting. The matter was again considered at a recent meeting of the Board, with the result that the publication of a Spanish edition of *The Journal* was authorized.

The question of establishing closer relationship with the Central and South American republics, Mexico, Cuba, the Philippine Islands, etc., has long been regarded as an important one. The Pan-American Union has been developing this spirit of friendship and co-operation for many years. While business and commercial relations have been developing very rapidly, thus far the scientific men of the United States do not seem to have appreciated the opportunities and the benefits that would result through mutual exchange of views and ideas and of the results of research and investigation. The medical problems of Latin America always have been essentially the same as ours; we have only to recall the comparatively recent epoch-making work of Finlay, Reed, Gorgas, Guiteras, Liceaga and Cruz on yellow fever, of Ashford on hookworm disease, and of Strong on verruca peruana to show how identical are our interests in this field, and how much is to be gained by making each other acquainted with what we are doing and what we have already done. Our colleagues to the south of us have been looking more to France and Germany than to this country for their medical literature, and their medical students were more likely to go to those countries than to this for their undergraduate and postgraduate work.

Some weeks ago letters were sent to about two thousand physicians in Central and South America, outlining the proposition of publishing a Spanish edition of *The Journal*, and asking their opinion as to whether such a journal would be welcome. There has not been time for replies except from Central America and the northern parts of South America; but all of these replies have been enthusiastically favorable to the proposition.

Preparations are now being made for the publication of the initial number early in January. For the time being the Spanish edition will be issued semi-monthly. It is proposed to include in it practically all of the scientific matter that appears in The Journal. Original articles and editorials that are of local or very ephemeral interest will not be included, nor will it include the medical news listed under states, marriages, deaths or matter of this character. In a word, everything that may be regarded as of general interest to the new readers, and especially all that is of permanent value, including, of course, the abstracts, Current Medical Literature, and foreign letters, will appear in the Spanish edition.

It needs no prophet to forecast the fact that the relations, always close, between the democracies of North and South America will with every succeeding day become closer and more advantageous on both sides. The better we know each other, the better friends we shall be. Nowhere can this friendship and close relationship be more fruitful than in the field of science, and especially in medical science. It is in this spirit of co-operation and confraternity that the American Medical Association is entering on this enterprise. It may be unnecessary to say that no financial gain is hoped for from this publication. If after several years it pays its own way, it will be doing all that can now be expected of it. Rather, it may be said that the enterprise is begun wholly with the spirit of fostering true internationalism and with purely altruistic motives.—Jour. A. M. A., Dec. 7, 1918.

DEMOTILIZATION AND VENEREAL DISEASES

The prospect of demobilization of more than 4,000,000 troops presents a large sanitary problem, especially as regards the venereal diseases. The situation offers a unique opportunity for influencing the spread of these diseases in this country. If proper action can be taken so that every soldier with venereal disease can be rendered non-infectious before discharge from the Army, the future venereal disease condition of the country will be greatly benefited. If no successful effort can be carried out to render these men non-infectious before their demobilization, the result, on the contrary, must inevitably be a great increase in the incidence of these diseases. One of the greatest disasters of war is the spread of infections that occurs through the occupation of territory by troops, and even to a greater extent through the disbanding of troops at the close of war. Epidemics following wars have often caused far greater loss of life than have the actual casualties of war itself or diseases occurring among troops during the prosecution of war. This applies particularly to the venereal diseases.

It is clear, then, that a serious epidemic of venereal diseases may befall us if a thoroughgoing, vigorous policy is not pursued in demobilization. Fortunately, it would appear to be comparatively simple to outline a course of action, which, successfully carried out, would minimize and probably eliminate this danger, and furthermore, would have an appreciable effect in diminishing the present incidence of venereal infections. The fundamental proposition is that soldiers should not be discharged from the Army as long as they are infec-

tious with chaneroid, syphilis or gonorrhea.

The problem of chaneroid is a small one, since few cases of this condition or its sequelae occur that cannot be definitely rid of infectiousness in a few weeks.

The practical dangers of syphilis are from the chanere, from mucous patches in the mouth and about the genitals, and from condylomas. All of these can be disposed of in a few weeks under active treatment. While there is always some danger of recurrence within the next few months, this danger rapidly diminishes as time elapses. In patients who have been treated vigorously with mercury or with mercury and arsenphenamin, the danger from these lesions disappears in from four to eight weeks in most cases, and is almost eliminated within six months after the beginning of treatment. In active cases of syphilis, therefore, a great practical advantage would be gained by holding patients for two months, and their danger to the country would be practically eliminated by delaying their discharge for six months. Any remaining trace of danger could still further be reduced by impressing on all such patients the necessity for further treatment, which of course they should have for their own good.

The incidence of gonorrhea is so great, and its infection so insidious after the disease becomes chronic, that it presents the most important and the most difficult of these problems. There are, however, certain definite, well-recognized criteria by which the infected men may be judged to be free from subsequent danger of infectiousness. These criteria can be met by treatment in many cases in from three to six weeks, in most cases in from six to eight weeks, and the cases are

rare that cannot be cleaned up by intelligent, vigorous treatment within six months. Patients with gonorrhea in the Army should not be discharged until they meet these criteria. 1

The practical difficulties of the general problem are (1) the trouble and expense of holding the infected men while undergoing treatment before discharge, and (2) the danger of these men becoming marked in the minds of their civil acquaintances as being venereally infected by reason of the delay in their discharge. The former is of small importance compared to the great advantage for the civil population which this policy would involve. To send these men back to civil life with their infections uncured would be a sanitary crime. The second of these difficulties would not seem hard to obviate because of the relatively short time necessary to carry out this policy. The American Army from Europe cannot be disbanded in a week after it reaches our shores. Some men will have to be retained in service for a few months. The same facts apply to the men in the

1. The following test of cure of gonorrhea is taken from "The Venereal Diseases," American Medical Association, 1918, price 25 cents:

The man should take vigorous exercise on the day before the one on which the examination is to be made.

He should not urinate for two hours before the examination is made.

Examination should show the following findings:

1. He should have no urethral discharge, or at most a mucopurulent drop at the meatus should be obtained on stripping the penis.

2. If such a drop is found, it must be free from gonococci.

3. In the two glass test, both Glass 1 and Glass 2 must be clear and free from pus shreds. Epithelial shreds free from gonococci may be disregarded.

4. The secretion obtained by massage of the prostate and seminal vesicles must show no gonococci and few leukocytes.

5. Examination with a bougie a boule should demonstrate the absence of stricture.

various domestic camps. It ought, then, to be possible to detain the venereally infected without disclosing the reason for so doing.

According to newspaper reports, Surgeon-General Ireland proposes to detain men with infectious diseases, including venereal diseases, in accordance with a general policy. It is greatly to be hoped that no considerations of expediency will be interjected to interfere with this enlightened policy.

—Jour. A. M. A., Dec. 7, 1918.

To the Editor:

In the August copy of the Journal Dr. C. L. Kibler, in his discussion of Dr. P. V. Mikell's paper on "Tonsillectomy with Local Anaesthesia," says that Dr. Justus Matthews has eighteen per cent of secondary hemorrhage in a series of 1,000 cases from twenty-four hours to five days after operation under local anaesthesia. Dr. Kibler's authority for this statement is found in the Ear, Eye, Nose, and Throat volume of the Practical Medical Series of 1917, and is an abstract from Journal-Lancet of March 15, 1917. Dr. Mikell has a personal letter from Dr. Justus Matthews dated October 14, 1918, in which Dr. Matthews' statistics of secondary hemorrhage after tonsillectomy under local anaesthetic is given as two per cent.

The discrepancy in Dr. Matthews' percentage of hemorrhage as quoted by Dr. Kibler (18%) and by Dr. Mikell (2%) is evidently explained by a misquotation of Dr. Matthews by the Practical Medicine Series of 1917. We publish this simple statement of the facts so that our statements about the matter may be understood in fairness to all concerned.

(Signed)

C. L. Kibler.

Pinkney V. Mikell.

Aiken County,
Beech Island, S. C.
December 2, 1918.

The Journal of the S. C. Med. Assn.,
Gentlemen:

Kindly enroll me as a subscriber of the Journal. You will find enclosed P. O. Money Order for \$2.00, the subscription price for one year.

My practice lies so near to Augusta and being associated more or less with the doctors of that city, I have not kept in touch with medical affairs in my own State, although I have been practising in this community for about forty years. In regard to the recent epidemic of Influenza, you may be interested in the fact that during six weeks of the steadiest hard practice I ever had, every case recovered, in spite of complications of pneumonia, malaria, hemorrhage, fever, etc. Since that time I have lost one case from pneumonia following Influenza—a negro woman. Only about twenty or thirty of my cases were whites, the other hundreds being negroes. Today begins the ninth week since the epidemic proper began here and for a week past my record has dropped to from one to three new cases a day.

Dr. Thos. Hutson, of Aiken, sent me a copy of the Journal recently which I found interesting and which reminded me that I ought to be a subscriber.

With best wishes, I am,

Yours very truly,

P. H. Eve, M. D.

THE DIAGNOSIS AND PROGNOSIS OF HYPERTROPHIC SPHENOIDITIS

Greenfield Sluder, M. D., St. Louis

Of the utmost importance is the kind of light to be used in postnasal examinations. Sunlight would be ideal

were it not for the great heat conveyed which renders it useless.

The light made by Leitz under the name of the "Lilliput Arc Lamp" is as satisfactory as the sun and always available. The carbons meet at right angles and give a brilliant white light which is condensed into a pencil by a convex lens. It is a different light from that of the arc lamp used in street illumination. In burning, a little white smoke is given off, which condenses to a white powder, indicating that the carbons have been impregnated with a zinc salt which may be the way in which the white light is made. Leitz declines to tell the process of manufacture.

The advantages of a proper light are obvious, in that diseased conditions, as also the presence of a small amount of pus, are the more readily recognized. At times the Holmes nasopharyngoscope is of the utmost help by virtue of the right angle vision.

The author presents a clear description of the normal postethmoid-sphenoid district.

All changes in these parts should be carefully noticed, because a very slight surface change is often accompanied by much more advanced and serious change in the deeper parts, as is often shown by the finding of polyps within the cells at the time of operation, no evidence of which was previously recognized there. Patches of inflammation may often be found with the pharyngoscope within the cells which are very pernicious and disastrous according to their location, for example, upon the optic canal.

He does not believe that the postethmoid sphenoid operation is free of danger in the hands of any rhinologist. He has seen the eye, which it was intended to save, lost for the vision it had at the time of operation, and he had



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(1941)

learned of death following a number of these operations. Sometimes a sphenoid sinus makes the inner part of the canal, and sometimes the postethmoid makes it, and there is no way to tell in a patient at the time of operation which it is, hence the sure practice is to do the combined operation.

The distribution of the hyperplastic process here is of great interest and various.

The presence of pus is not the only indication of diseased conditions here, as there may be active inflammatory conditions without it. The author calls attention to the appearance of the epithelium under different conditions. With a proper light, when pus is present it is almost invariably greenish yellow or yellowish green, whereas the opaque epithelium is white or very slightly bluish white.

This form of sphenoiditis is rarely unilateral. Anomalous anatomic arrangements of these parts exist, and failure to bear these possibilities in mind may defeat our best technical efforts, and these anomalies are described. The diagnosis becomes exceedingly difficult in children.

As to prognosis, the infection "coryza" in these parts may be of grades so slight that the patient is not cognizant of it and still make the ocular or the painful lesions. The acutely inflamed area may, however, be seen with the pharyngoscope after the cells are opened. And for the second class of cases the prognosis is also for relief, but it must needs be slower and less complete, although in the long run the result is preeminently wirth the effort it took to get it. These cases have seemed to be less disturbed by coryzas.

The postethmoid sphenoid radical operation, properly performed in the first class of cases, almost always gives a technical result that remains satis-

factory—that is, the openings of the cells remain as the operator makes them. In the second class they almost always get smaller, and very frequently close up completely, and so must be made again, often several times.

In later life an involution of the hyperplastic changes—rarefying ostitis—takes place. Sometimes beginning about the fiftieth year and sometimes later. The author has seen this in unoperated cases accompanied by corresponding cessation of symptoms (in one case an ophthalmic migraine).

THE VALUE OF THE DICHLORAMIN-T CHLORCOSANE SOLUTION (DAKIN-DUNHAM) IN THE TREATMENT OF INFECTIONS OF THE UPPER AIR PASSAGES

Dr. Bryson Delavan, M. D., New York

Dichloramin-T, the basis of the Dakin-Carrel fluid so extensively used as an antiseptic in a wide variety of infectious conditions, has an intense germicidal action corresponding to its high content of chlorin. It is difficult to find for it perfectly satisfactory solvents which will yield stable solutions. Drs. Dakin and Dunham state that the best medium thus far found is an oil obtained by the chlorination of paraffin wax, to which has been given the name "chloreosane." Other solvents experimented with are a mixture of eucalyptol and paraffin oil, and a heavy oil obtained by the chlorination of eucalyptol. Eucalyptol has been found to be irritating. Chlorcosane is not irritating and has seemed decidedly preferable. Explaining the action of dichloramin-T in oil, Dr. Dakin says that antiseptics incorporated with or dissolved in oily substances usually possess little if any antiseptic activity because intimate contact with the in-

feeted matter is hindered by the oil. When, however, the diechloramin-T solution in chloreosane are brought in contact with aqueous media the partition coefficient between the oil and the water is such that a certain amount of the diechloramin-T passes into the water and there exerts its germicidal action. The amount of the diechloramin-T thus passing from the oil is increased by the presence in the aqueous medium by substances capable of taking up chlorin. So that the oil solution seems as a store for the antiseptic which is drawn upon to maintain the germicidal activity of the aqueous medium with which it is in contact. The dichloramin-T oil solution may be sprayed upon wound surfaces or poured into accessible parts of deep wounds. It yields moderate amounts of the antiseptic to watery media, such as secretions from wounds or mucous membranes. It is suitable for sores requiring prolonged antiseptic treatment and for first dressings of wounds which do not require irrigation. The application of the oil is extremely simple, and generally it need not be renewed more than once in twenty-four hours.

Admitting the germicidal power of diechloramin-T, it is desirable to study its value in the disinfection of septic conditions of the upper air passages, regions especially liable to infection, prone to harbor germs of dangerous character, abounding in recesses difficult of access by the ordinary means of application, and often becoming foci of infection threatening extreme danger. This is especially true of the upper nasal region, the vault of the pharynx and the tonsils. The diechloramin-T may be used to advantage in these regions under three different conditions:

1. To prevent the extension of newly acquired infection.



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They place three grains at your command, better fitted for digestion than they ever were before.

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2. To overcome the acute results of infections, and
3. To abolish the bacilli persisting in carriers.

The success of the method must depend upon the thoroughness of the application of the disinfectant. Brushing the surface of the tonsil or spraying the lower section of the nasal cavity cannot possibly be effective. A spray atomizer must be used which will carry the spray in all directions, upward, downward and sidewise.

The crypts of the tonsil must be disinfected to their lowest depths, and the superior half of the nasal cavities must be thoroughly reached. To effect this the following principle must be recognized and carried out: The parts must first be cleansed, and then exposed to the fullest extent by the application of adrenalin or some similar astringent, and finally the dichloramin-T oil sprayed into them until every crypt and recess has been completely reached. This thoroughness is absolutely necessary in order to secure the removal of the most deeply seated germs.

Used in the strength of two per cent or less, the solution with chloreosane is not irritating, although stronger solutions may be. Suitable atomizers are necessary. The success of this method has thus far been gratifying.

Where this method fails, in the presence of hypertrophied tonsils or adenoids, the removal of the latter may be necessary to effect a final cure.

The desire of the author is to furnish a method so simple in itself as to be readily carried out by the average practitioner, with the aid of apparatus inexpensive, durable, clean, compact of form, light of weight and therefore available for use under all circumstances of medical practice, whether civil or military.

The essentials to success are:

1. Recognition of the principle of

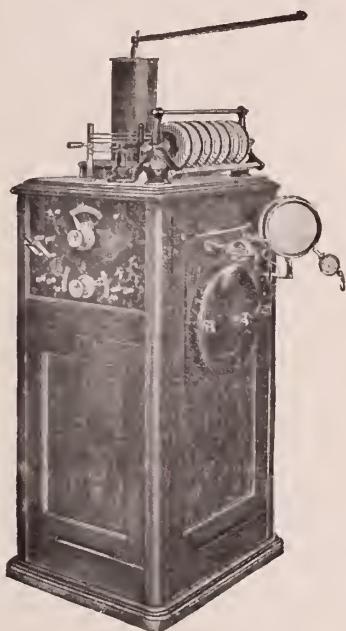
the necessity for the complete exposure of the centers of infection.

2. The use of a proper spray atomizer.
3. The devotion of sufficient time and care to the effective carrying out of the treatment.

THE COUNTY JAILS OF ILLINOIS

That the county jails of Illinois are admittedly the disgrace of the State is an assertion made by Anne Hinrichsen, of the Illinois State Welfare Committee, in *The Modern Hospital*. And the evil, moreover, is so deep-rooted that the attacks of practical reform and social justice have availed but little. Not only do the jails fail to prevent or lessen wrong-doing, but they are actually a powerful factor in the promotion of degeneracy and crime, because their physical construction is such that they are unsanitary, ill-ventilated, dark, and too small or too poorly planned to permit of classification of prisoners or of the separation of the healthy from the sick; their method of operation, clogged air shafts, disabled plumbing, filthy bedding, the common towel, drinking cup and bath tub, presence of rats and vermin, and failure on the part of the sheriff to enforce the classification law, make even the better class of jails dangerous; the enforced idleness system, which is almost universal, predisposes the prisoner to mental, moral and physical contagion; and the fee system of feeding, arousing in the prisoner, as it does, a contempt for the law, sends him forth from the jail a greater enemy to society than he was when he entered.

The law for establishing a work farm for offenders over sixteen years of age and the one abolishing fees to sheriffs for food of prisoners will both be instrumental in removing from the dungeons of darkness many of their worst evils.



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COMBINATION: A student may enter the regular Freshman class on 14 units and attend the College of Liberal Arts for two years, after which he will be admitted to the Freshman Medical Class, and upon the completion of his Sophomore year in the Medical College, can obtain the degree of Bachelor of Science, gaining his M. D. degree after another two years at the Medical College.

INSTRUCTION: Thorough laboratory training and systematic clinical teaching are special features of this institution. The faculty is composed of 106 professors and instructors, twelve of whom are full-time salaried men.

EQUIPMENT: Five large new modern buildings devoted exclusively to the teaching of medicine, well equipped laboratories, and reference library.

HOSPITAL FACILITIES: The Grady (municipal) Hospital of 250 beds is in charge of the members of the medical faculty during the entire college session, and the Senior Students (in small sections) are given daily clinical and bedside instruction there. In the near future, work will begin on the new Wesley Memorial Hospital (of 200 beds) at a cost of not less than \$200,000.00, which will be erected on or near the site of the present Medical College. The wards of this hospital, when completed, will be under the complete control of the faculty for teaching purposes. The J. J. Gray Clinic, which has just been completed at a cost of \$75,000.00 affords ample accommodations for this large clinic, and excellent facilities for clinical instruction.

RATING: This college is rated as a Class A Medical School by the Council on Medical Education of the American Medical Association and is a member of the Association of American Medical Colleges.

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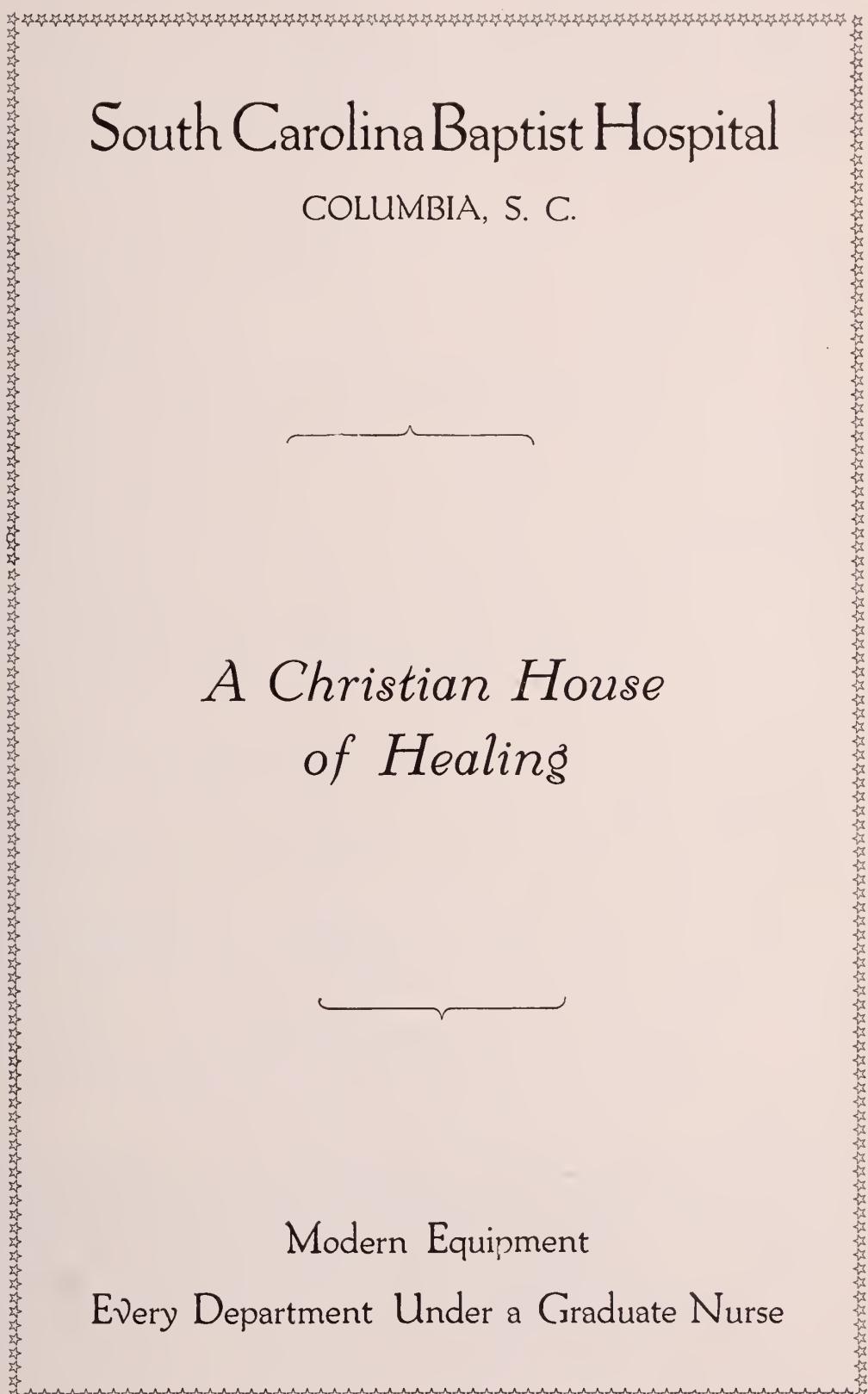
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FIFTEEN cases of boils and carbuncles were cured by yeast treatment, out of a total of sixteen cases of obstinate character! A ease of style promptly yielded —the eure being very rapid.

These tests formed part of an investigation of compressed yeast as a therapeutic agent, made at the Jefferson Medical College, the Philadelphia General Hospital, and the New York Roosevelt Hospital, and reported by Philip B. Hawk, Ph. D. (Journal A. M. A. Vol. LXIX, No. 15),

"In furunculosis," the report states, "yeast is a remarkably efficacious remedy. Its curative action in these cases is no doubt aided by the leukocytosis which is developed."

FLEISCHMANN'S COMPRESSED YEAST, which is put up and sold in the familiar tinfoil package at grocery stores, and used by the housewife in making bread, was used. It is a scientifically cultured yeast, being of the species *Saccharomyces Cerevisiae*, and is of uniform strength.

Three eakes daily, between meals, was the usual dosage administered, in a suspension of water, fruit juice or milk.

This yeast may be secured fresh daily in most grocery stores. Or, write the Fleischmann Company in the nearest large city, and it will be mailed direct on days wanted.

A reprint of Dr. Hawk's report, with added matter on the production of the yeast, has been distributed to physicians. If not in your files, a copy may be had upon request.

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Free Work Done:	986	5,588	6,744	6,623
Total Percent. Deaths:	.03	.03	.02	.02 1/2

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